

REPORT OF THE STUDY GROUP
ON THE
TRAINING OF ELEMENTARY
TEACHERS IN INDIA



MINISTRY OF EDUCATION
GOVERNMENT OF INDIA
NEW DELHI
1963

Price : . Inland Rs. 1.30 nP.
Foreign 3 sh. 1 d. or 47 cents.

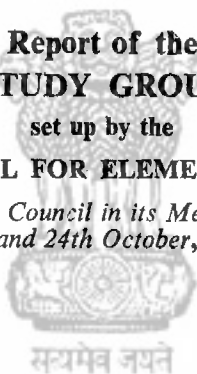
THE TRAINING OF ELEMENTARY TEACHERS IN INDIA

**Report of the
STUDY GROUP**

set up by the

ALL INDIA COUNCIL FOR ELEMENTARY EDUCATION

*(Approved by the Council in its Meeting held on the
23rd and 24th October, 1962)*



MINISTRY OF EDUCATION

1963



सत्यमेव जयते

PRINTED IN INDIA BY THE MANAGER, GOVERNMENT OF INDIA PRESS,
FARIDABAD AND PUBLISHED BY THE MANAGER OF PUBLICATIONS, DELHI, 1963.

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सत्यमेव जयते

CHAPTER ONE

INTRODUCTION

This Study Group on the Training of Elementary Teachers in India was appointed by the All India Council for Elementary Education in its fifth meeting held at New Delhi on 30th and 31st October, 1961. Its membership is given below :

1. Shri Raja Roy Singh—*Chairman*
 2. Dr. Salamatullah
 3. Shri L. R. Desai
 4. Shri K. S. Radhakrishna
 5. Shri A. C. Devegowda
 6. Shri S. P. Verma
 7. Shri D. P. Nayar
 8. Shri T. K. N. Menon
 9. Shri J. K. Shukla
 10. Shri J. P. Naik—*Secretary*
2. The following were the terms of reference of this Study Group :
- (i) To prepare a programme for the improvement of teacher training at the primary stage.
 - (ii) To study and report on the following topics referred to by the All India Council in its meeting held on the 30th and 31st October, 1961, viz. :—
 - (a) The need of specific training in the theory and practice of primary education for those who are required to work as teachers in primary training institutions and inspectors of primary schools.
 - (b) Measures to effect qualitative improvements in the preparation of elementary teachers.
 - (c) A time limit should be laid down with regard to the relaxation of minimum educational qualification for recruitment and training of candidates of scheduled castes, scheduled tribes and women candidates as teachers.
 - (d) The maximum upper age limit for admission in the training schools should be prescribed.
 - (e) Making provision for deputing teachers in service for training, specially in States where there are a large number of untrained teachers in service.
 - (f) Education of primary teachers in India.
 - (g) Report of the first national seminar on the training of primary teachers in India.
3. The Group held two meetings at New Delhi. The first meeting was held on the 3rd and 4th August and the second on the 20th and 21st September, 1962.

In the first meeting, the Group studied the documents which had been prepared for it by the Ministry of Education and also examined the proposals of the Ministry for the development of teacher training at the elementary stage of education. Certain tentative recommendations were formulated and incorporated in a draft Report, which was considered and finally adopted in the second meeting of the Group.

4. With regard to the implementation of the recommendations made in this Report, we suggest that :—

- (i) Copies of this Report may be circulated and the State Governments requested to set up Study Groups for an examination of the problems of teacher education at the elementary level, as suggested in this Report.
- (ii) It should be possible for the Study Groups in the States to complete their work by May 1963 at the latest.
- (iii) An all-India Report based on the proposals of the Study Groups should be compiled and placed before the next meeting of the All India Council for Elementary Education.

5. We should like to invite the attention of the Ministry of Education to the following recommendations made by us.

- (i) A perspective plan for the development of elementary education in general and that of teacher education at the elementary level in particular (to cover the period from 1961 to 1975) should be prepared as early as possible;
- (ii) The implementation of the plan for teacher education should start from the fourth year of the Third Five Year Plan itself; and
- (iii) That an appropriate financial provision should be made in the Third Five Year Plan for the implementation of this programme.

6. We take this opportunity to record our appreciation of the assistance given to us by the Secretariat of the Ministry of Education in compiling the data for this study.

Raja Roy Singh
Salamatullah
L. R. Desai
K. S. Radhakrishna
A. C. Devegowda
S. P. Verma
D. P. Nayar
T. K. N. Menon
J. K. Shukla
J. P. Naik

NEW DELHI,
September 21, 1962.

CHAPTER TWO

THE EDUCATION OF ELEMENTARY TEACHERS IN INDIA—A HISTORICAL SURVEY (1800—1961)*

Education of Primary Teachers prior to 1857

7. In the indigenous system of elementary education that existed in India at the opening of the nineteenth century, there was no room for teacher education as a well-defined concept. The teachers of the indigenous elementary schools were mostly the products of the schools themselves and knew just enough of the subject-matter they were required to teach. They also had no special training in methods except what they had probably learnt in an apprenticeship to some teacher in their early years. But what was thus lost in the knowledge of the subject-matter or methods of teaching was generally made up through an earnest devotion to duty and individual attention to each child; and, within the limitations of their curricula, the indigenous schools maintained a fairly good standard of education.

8. When the modern system of education began to be built up in India, the different stages of education—primary, secondary and university—were not demarcated clearly in the initial stages and all schools were divided into two groups—Vernacular and English—on the basis of the media of instruction they used. The object of both the types of schools was just the same—the spread of western science and literature. The vernacular schools of this period, therefore, aimed at spreading western literature and science through the medium of the modern Indian languages. In Bombay, for instance, the vernacular schools had classes from I to X and their curriculum included a study of reading, writing, arithmetic, history of England and India, geography, astronomy, natural philosophy, algebra, Euclidean geometry and trigonometry. As there were no teachers who could teach such a syllabus, a training course of three years' duration was first started in 1824 and when the students began to come out, vernacular or primary schools were established from 1826. In this scheme, the education or training of teachers became a condition precedent to their appointment in schools. This 'training', however, was almost exclusively confined to a knowledge of the subject-matter and did not include instruction in the science and art of teaching.

9. This ambitious view of primary education was not shared by other Provinces of India. In Bengal and Punjab, primary education was generally neglected prior to 1854. In the North-Western Province, Thomason launched a big drive to provide for the elementary education of the people through the development of the indigenous schools. The basic idea of his proposal was to accept the indigenous schools

*Some explanation is necessary about the terminology used in this Chapter. Prior to 1947, the expression "primary education" has been used because this was the expression then used in the all-India documents, although the exact nomenclature of this stage of education was different in different Provinces. The connotation of the term "primary education" is exactly the same as in the Report of the Hunter Commission and the Quinquennial Reviews of the Progress of Education in India between 1886 and 1947. In the post-independence period, the expression "elementary education" has been used to denote Classes I—VIII, "primary education" to denote only Classes I—V and "middle school education" to denote Classes VI—VIII.

as the principal institutions for the spread of primary education, to introduce printed books in them, to educate their teachers, and gradually to induce them to broaden their curricula and to introduce the new subjects which would spread western science and literature. In this scheme also, the education of teachers was indispensable and significant; but it was not an indispensable pre-service activity as in Bombay. On the other hand, it was to be attempted through an in-service programme of teacher education, through the provision of supervision and inspection, and through grants-in-aid.

10. Prior to 1857, Bombay and North-Western Provinces were the only two Provinces where major steps had been taken to provide teacher education at the primary level. Madras had also established a small normal school to train its primary teachers; but in the rest of the country almost nothing had been done.

Education of Primary Teachers (1857—1901)

11. During this period, the three stages of education—primary, secondary and higher—were clearly demarcated. Moreover, there was a good deal of expansion of primary education, thanks mainly to the levy of local fund cesses. By 1901-02, the total number of primary schools rose to 97,854 with an enrolment of 32,04,336. The number of primary teachers rose to 1,11,259 and the total expenditure to Rs. 1,18,75,759. To keep pace with this expansion, a large number of normal schools were established and in 1901-02 the country had 155 normal schools (104 for men and 51 for women) with a total enrolment of 5,405 and an expenditure of Rs. 7,12,154.

12. The primary schools, as they came to be evolved in this period, were no longer the ambitious institutions trying to spread 'western science and literature'. On the other hand, they were humble institutions which taught a little more than the three R's and prepared their students for the secondary schools. If students who had completed secondary school could have been available as primary teachers, no 'training' would probably have been organised for them because, even at this time, the 'training' of a primary teacher essentially meant his 'further general education'. But such teachers were hardly available, partly because secondary education had not been adequately developed, partly because every student who had completed the secondary school got a fairly well-paid job under the Government, and partly because the salaries of primary teachers were very low. Under the indigenous system of education very little was expected of the primary teacher. He was always a local man and he also had some other means to maintain himself. Consequently, his total remuneration was very small. When the modern system of primary education began to be developed in India, the remuneration of primary teachers unfortunately came to be governed, not by what other servants of the Government were getting, but by what the indigenous teachers of old used to get. The poor remuneration of primary teachers thus became an integral part of our primary system at a very early date. At the opening of the nineteenth century, the average remuneration of a teacher in the indigenous elementary school was only about Rs. 60 a year. By 1881-82, this had risen only to Rs. 89 a year and even by 1901-02, it was only Rs. 91 a year, the highest salaries being paid in government schools and the lowest in aided or unaided private institutions. Taking all types of primary schools together, it

was reported that, in 1901-02, the range of salaries of primary teachers was Rs. 3 to Rs. 20 in Madras; Rs. 3 to Rs. 8 in Bengal; Rs. 3 to Rs. 55 in Punjab; Rs. 6 to Rs. 20 in Central Provinces; Rs. 3 to Rs. 60 in Bombay; Rs. 2 to Rs. 25 in U.P.; Rs. 3 to Rs. 15 in Assam; and Rs. 8 to Rs. 35 in Berar.

13. On account of these low salaries, the persons who entered the profession of primary teachers at this period were those who had completed the primary school only (in which case they were designated as 'qualified') and a fair percentage of them had not done even this (in which case they were designated as 'unqualified'). The great need of the day, therefore, was to remedy this weakness in the general education of the primary teacher and consequently the 'training' programmes of this period emphasized the knowledge of the subject-matter to which they devoted 70 to 85 per cent of their time. Pedagogy proper played a minor role. Philosophy of education and methods of teaching, school organisation, discipline, moral training, history of education and such other problems were included in the theoretical study and students were also required to teach in the practising school for a specified period, to attend model lessons and to give criticism lessons. But on the whole, **this instruction in pedagogy** formed a small part, about 15 to 30 per cent, of the entire course.

14. It may also be pointed out that the duration of the training course as well as the requirements of admission to training varied from Province to Province. Madras admitted persons who had completed the primary school and provided a one-year course. Bombay had the same qualifications for admission but provided courses of one, two or three years' duration. Bengal had almost the same requirements for admission and provided courses of one or two years. U.P., Punjab and Assam had the same admission requirement, viz., the completion of the middle school; but U.P. provided a two years' course and Assam provided one, two or three-year courses as in Bombay, and Punjab provided a one-year course. The Central Provinces provided a two-year course after the completion of the primary school while Berar adopted the Bombay system.

15. Poor as this training programme obviously was, it may be pointed out that only 18.4% of the primary teachers in 1901-02 were trained! But even this low percentage did not disturb the official conscience. On the other hand, the Reports of the Directors of Public Instruction of this period pointed out that 50.6 per cent of the primary teachers had 'other qualifications' which were deemed to be adequate. These 'other qualifications' included the passing of a higher examination in general education (such as the middle school or lower secondary) or the completion of satisfactory service for a specified period which varied from two to seven years in the different Provinces. But even with such liberal interpretation of the 'qualifications' required of a primary teacher, 31 per cent of the teachers were returned as having 'no special qualifications'. The truth is that, at this time, pedagogic training was neither emphasised nor valued and a mere knowledge of the subject-matter was deemed to be adequate to qualify a person to be a good teacher. The Hunter Commission quotes an education officer having large experience in England and India who observed that "the best way to teach a man

to teach arithmetic is to teach him arithmetic; and if he knows arithmetic and you want additionally to qualify him to teach arithmetic, the most efficient way of expenditure of your extra tuition upon him will be to teach him algebra, rather than talk to him of teaching arithmetic". A programme of professional training, other than one of remedial general education, could not have grown up under such a climate of educational opinion.

16. Another outstanding achievement of this period was the establishment of normal schools for women teachers. This was mainly due to the efforts of Miss Mary Carpenter, the well-known social worker of England, who paid several visits to India during this period and persuaded the Government of India to establish normal schools for women teachers. By 1881-82, there were 15 normal schools for women in the country with a total enrolment of 515 and by 1901-02, their number had increased to 51 with 1,252 pupils.

17. One feature of these early institutions deserves special notice. As educated women were hardly available to seek admission to training institutions, they did not generally prescribe any specific admission standard. On the other hand, even illiterate women were admitted, provided they were intelligent and willing to be teachers. In fact, these normal schools were really schools of general education meant for the preparation of adult women as teachers of primary schools and might well be described as the fore-runners of the modern system of 'condensed courses for adult women'. As girls' education progressed, the entrance qualifications to training institutions were gradually raised. As a consequence of this low standard for admission, however, the duration of the 'training' course for women was generally longer than that for men.

18. Two interesting experiments of this period may be mentioned before closing the discussion. The first is the experiment of 'sessional schools' in Madras. These sessional schools were intended for improving the subject knowledge of primary teachers. They were opened on a temporary basis in areas where there was a large number of untrained primary teachers. They prepared teachers for the admission examination of the normal schools and were closed as soon as that purpose was served. A similar experiment tried in Bengal was that of *guru* training classes started in 1885-86. Under this plan, the headmasters of selected middle schools were authorised to open classes for instructing the *gurus* of the neighbouring *Patha-shalas* in the subjects of the upper primary examinations and to give them an elementary knowledge of school method. The course of instruction extended over one year. Such *ad hoc* methods of improving the educational qualifications of primary teachers were fairly common during this period and were tried in several parts of the country. They also served a useful purpose. With the general development of educational facilities, however, they receded to the background.

Education of Primary Teachers (1901—21)

19. With the opening of the twentieth century, a new chapter begins in the history of primary teacher education in India. This was due to three main reasons: (1) large-scale expansion of primary education; (2) broadening of the objectives of primary education; and

(3) greater recognition of the need for teacher education for improving the quality of education.

20. The expansion of primary education was greatly facilitated, at this period, by the great political awakening in the country, by the demand for compulsory primary education that was now being put forward, and by the decision of Government to provide larger resources to primary education from Provincial revenues than had generally been the case in the past. By 1921-22, therefore, the number of primary schools increased to 1,60,070 with an enrolment of 63,10,400 pupils as against 97,584 schools with 32,04,336 pupils in 1901. Similarly, the number of teachers rose to 249,040 and the total direct expenditure to Rs. 5,09,08,107 as against 111,259 teachers and an expenditure of Rs. 1,18,75,759 in 1901. This represents an increase of about 60 per cent in the schools, of about 100 per cent in enrolment, of about 125 per cent in the number of teachers (the average pupil-teacher ratio fell from 29 in 1901 to 25 in 1921), and of about 330 per cent in total direct expenditure on primary education.

21. Of even greater significance is the widening of the objectives of primary education which was attempted in this period. Although the idea of primary education began with the noble concept of spreading western science and literature through the modern Indian languages, this view was soon given up and the main objective of the primary schools was restricted to the teaching of the three R's and to preparing their pupils for entrance into middle schools. By 1870, the course of primary education covered three or four years only and was essentially similar to that in the indigenous schools. But then an upward movement started and the curriculum of the course began to be made richer and its duration longer. By 1901-02, the duration of the primary course had been raised to five years (Infant class and four classes) in Madras; eight years in Bombay (Infant class and seven classes); seven years in Bengal (Infant class and six classes); six years in U.P. (2 classes each of preparatory, lower primary and upper primary); five years in Punjab and C.P. (Infant class and four classes); and six years in Assam (Infant class and five classes). The objectives of the course were also defined more broadly now and it was laid down that primary education should strive "to teach the child to read and write his own language; to obtain a sufficient knowledge of arithmetic and mensuration to enable him to do easy sums and to understand the simple forms of native accounts and the village map; to acquire a rudimentary knowledge of geography, agriculture, sanitation and of the history of his country; to train his faculties by simple kindergarten and object lessons; and to develop his physique by drill and exercise".* Moreover, emphasis was now placed on the methods to be used in teaching and it was laid down that an endeavour should be made to render the course less bookish and more practical, especially by the introduction of kindergarten methods and object lessons. With the advent of these new concepts in the objectives and methods of primary education and with the increase in its duration, a demand for a better type of a primary teacher began to be put forward. It implied the implementation of two important programmes which had been rather neglected in the earlier period: (1) the

*Progress of Education in India, 1897—1902, para 495.

improvement of the remuneration of primary teachers; and (2) the provision of more and better training institutions.

22. The remuneration of primary teachers, and especially of trained primary teachers, was considerably improved during this period. This was due partly to the deliberate policy to improve it and partly to the rise in the cost of living caused by the First World War. The policies adopted were three: (1) to raise the minimum salaries; (2) to provide incremental scales of pay, wherever possible; and (3) to improve provision for old age. The average salary of a primary teacher, which was Rs. 91 in 1901-02, increased to Rs. 103 in 1911-12, to Rs. 113 in 1916-17 and to Rs. 174 in 1921-22. As before, the pay-scales of teachers varied largely from Province to Province. In U.P., the minimum pay of untrained assistants was fixed at Rs. 12, of trained assistants at Rs. 15 to Rs. 20, and of headmasters at Rs. 20 to Rs. 30. In Madras, the minimum pay of an untrained assistant was fixed at Rs. 10 and of a trained assistant at Rs. 12. The grants to aided primary schools were also raised and now varied from Rs. 48 to Rs. 180 per year. In Assam, the minimum pay of a trained teacher was fixed at Rs. 12. In the Central Provinces, the minimum pay was fixed at Rs. 15 for untrained teachers in rural areas and Rs. 17 in the urban areas and that of trained teachers at Rs. 20 in the rural areas and Rs. 22 in the urban areas. The teachers in the costlier districts were given Rs. 3 extra. In Punjab, the average monthly salary of teachers increased to Rs. 26 in 1921-22. In Bombay, the minimum pay of untrained teachers was fixed at Rs. 15 and that of trained teachers varied from Rs. 20 to Rs. 30. In Bihar and Bengal, most of the schools were aided schools and the remuneration of the teachers, although better than that in 1901-02, did not increase as largely as in the other Provinces. Most of the Provinces, however, reported that the "pay now enjoyed by primary teachers raises them beyond the fear of want and there is apparently no difficulty in getting recruits for the profession,"* while some official reports even began to speak of "warning the zealous reformers who would spend all available funds in raising the teachers' pay."* Although the rise actually effected in remuneration did not deserve either such tributes or panicky references, and although a part of it was offset by the rise in the cost of living, there is no denying the fact that admissions to the teaching profession began to be sought after more readily in this period and, thanks to the expansion of education at the middle and secondary stages, the minimum requirement of general education of primary teachers could be raised, in several areas, to the completion of the middle school or its equivalent.

23. There was an unprecedented increase in the number of training institutions and their enrolment during this period. In 1921-22, the country had 1,072 training institutions with an enrolment of 26,931 as against 155 institutions with an enrolment of 5,405 in 1901-02. Their total expenditure also increased from Rs. 7.12 lakhs in 1901-02 to Rs. 58.64 lakhs in 1921-22. This increase was shared by almost all Provinces. Madras now had 161 institutions; Bombay 43; Bengal 111; U.P. 471; Punjab 30; Bihar and Orissa 125; C.P. and Berar 18; and Assam 10. Steps were also taken to improve the training institutions by providing better staff, buildings, equipment, hostels and practising schools.

*Progress of Education in India, 1917-22, para 210.

24. Mention should, however, be made of one weakness of this expansion—the increase in the number of ‘classes’ or small institutions which could not be efficient. In some Provinces like Bombay or C.P., the number of institutions was small; but each institution was of a fairly big size. On the other hand, in some areas like U.P., Bihar or Bengal, the number of institutions was large but the average size of an institution was very small. In Bengal, for instance, reliance was placed on *guru* training schools. “The plan which was adopted was to establish a Government upper primary school in each sub-division, drawing pupils from the neighbourhood..... it was intended that the head-teacher at least should be a trained man who should have passed through one of the first grade schools. Attached to these upper primary schools is a class of about ten *gurus* who attend the school for a course of two years and spend part of their time in studying up to a higher standard of primary education than they had previously attained, part in acquiring some knowledge of drawing, school gardening and other subjects and part in learning a manual on the art of teaching and in teaching the children in the school under the supervision of the head-teachers. This system was applied to training both new candidates and teachers already in employment. In practice, the scheme has principally attracted teachers already in employment.”* In U.P., primary teachers were trained in “classes attached to middle schools, each class containing some eight students. Admission is limited to candidates who have passed the vernacular middle examination, the course is of one year’s duration. A special instructor is attached to the school to hold charge of the training class”.@ These small institutions were obviously inferior to good normal schools of a fairly big size and it was not also possible to make them efficient by modern standards. But unfortunately, most of the increase in training institutions which occurred in this period was due to the growth of *guru* training schools or attached classes of the U.P. type.

25. Owing to the increase in training facilities, the percentage of trained teachers also increased from 18.4 in 1901-02 to Rs. 39 in 1921-22. Here also, there were large variations from Province to Province. U.P. and Punjab had the highest percentage of trained teachers—57. But Bengal had the lowest—25. This was due to two reasons—the ineffectiveness of the *guru* training schools and the low remuneration of primary teachers. The Quinquennial Review of the Progress of Education in India, 1917—22, pointed out that the conditions regarding the training of primary teachers in Bengal were far from happy. It said: “By holding out the bribe of a stipend, and perhaps the use of some thinly-veiled compulsion, there are gathered into the *guru* training schools a number of teachers whose knowledge of the subjects they teach is little above that of the unfortunate taught. Here they attempt, in one year or in two, to go through the whole upper primary or middle vernacular course with a top-dressing of the Art and Theory of Teaching super-added. There are no foundations on which to build, so that it is not surprising.....that the actual work done by the trained teachers in primary schools is cruelly disappointing. It is in fact a misnomer to class the ordinary product of the *guru* training school

*Progress of Education in India, 1905-07, para 105.

@Progress of Education in India, 1917—22, para 122.

under the head of 'trained'. To undergo training implies the acquisition of professional and technical skill. Training, as interpreted in relation to primary education in Bengal, is merely a despairing attempt to supply by special means some part of what is wanting in the teachers' general equipment."*

Education of Primary Teachers (1921—47)

26. The expansion of primary education during this period was even more rapid than in the preceding period. In 1946-47, the total number of primary schools rose to 1,72,661 with an enrolment of 130,36,248 as against 1,60,070 schools with 63,10,400 pupils in 1921-22. The number of teachers rose from 249,040 in 1921-22 to 406,130 in 1946-47 and the pupil-teacher ratio increased from 1 : 25 in 1921-22 to 1 : 32 in 1946-47. The total direct expenditure on primary education also rose from Rs. 5,09,08,107 in 1921-22 to Rs. 18,48,53,225 in 1946-47. By and large, this represents an increase of about 8 per cent in schools, about 106 per cent in enrolment, about 63 per cent in the number of teachers and about 263 per cent in expenditure.

27. The remuneration of teachers increased still further during this period, especially towards the close of the Second World War. The average salary of teacher rose from Rs. 174 in 1921-22 to Rs. 188 in 1926-27 and to Rs. 197 in 1931-32. Owing to the effect of the world economic depression, salaries of all categories of public servants were generally revised and reduced. In keeping with this general trend, the average salary of the primary teachers also fell to Rs. 190 in 1936-37. It, however, rose to Rs. 206 in 1941-42 and Rs. 387 in 1946-47. This improvement in remuneration combined with the considerable expansion of middle school and secondary education which had taken place in the meanwhile, led to great improvement in the general education of primary teachers. By 1946-47, most of the primary teachers were at least "middle-pass". There were also amongst them a few graduates and a much larger number of matriculates.

28. In respect of the number of training institutions, a fundamental decision taken during this period was to discontinue small and inefficient institutions of the type of 'classes' attached to middle schools as in U.P. or the *guru* training classes in Bengal and Bihar and to replace them by regular normal schools of adequate size. The number of training institutions, therefore, fell from 1,072 in 1921-22 to 695 in 1926-27. This fall in numbers, it must be pointed out, did not affect the training institutions for women teachers which increased from 146 with 4,157 pupils in 1921-22 to 166 with 4,664 pupils in 1926-27. Nor did it largely affect the total enrolment in training institutions, except in a few areas, and the total number of teachers under training declined only from 26,931 in 1921-22 to 26,274 in 1926-27. Where this reduction in the number of training institutions meant merely a process of amalgamation or consolidation, as in Madras, the result was certainly a change for the better. But it was also due to two reasons which set back the cause of teacher education (1) the desire to restrict the percentage of trained teachers on grounds of economy—a policy which was adopted in Bombay on a large scale; and (2) the elimination of weak institutions without creating better substitutes. In U.P., for instance the 'classes' attached

*Progress of Education in India, 1917-22, para 269.

to middle schools were discontinued and rightly so; but new normal schools to take their place were not created with the result that the number of institutions fell from 440 with 3,793 pupils to 73 institutions with 1,223 pupils.

29. Had this setback been corrected in the next quinquennium, hardly anything would have been lost and the cause of teacher education would have advanced more rapidly. But unfortunately, a world economic depression began in 1929. India was affected by it in 1930 and it was only in 1937 that its effects passed off. Consequently, the years between 1927 and 1937 were generally those of cuts and retrenchments. It was, therefore, not possible to expand training facilities on a large scale and, in some areas, they had even to be restricted still further. The initial setback of the quinquennium 1921-26 continued to persist in the following decade also. The number of training institutions fell still further from 695 with 26,274 pupils in 1926-27 to 634 with 28,768 pupils in 1931-32 and to 563 with 27,354 pupils in 1936-37. Things began to change only after the introduction of provincial autonomy in 1937 and the coming of Congress Ministries into power. In 1941-42, the number of institutions rose to 612 with 32,121 pupils and in 1946-47, to 649 institutions with 38,773 pupils. The pattern of the total expenditure closely followed that of enrolment. It fell from Rs. 58.64 lakhs in 1921-22 to Rs. 46.61 lakhs in 1936-37 and then rose again to Rs. 51.09 lakhs in 1941-42 and to Rs. 91.01 lakhs in 1946-47.

30. In spite of these reverses, the percentage of trained teachers increased steadily during this period—from 39 in 1921-22 to 64 in 1946-47. It was high in Provinces like Madras and Punjab which had maintained a continuous progress and low in areas like Bengal and Bihar which had not developed adequate facilities, or in areas like Bombay which had deliberately restricted training facilities as a measure of economy. The percentage of trained women teachers was even larger—69.1 per cent as against 63.1 per cent for men.

31. It would be advantageous to review the content and duration of teacher training courses in the different Provinces of India as they existed in 1946-47. In Madras, there were separate training schools for those who had passed the middle school (these were known as elementary grade training schools) and for those who had completed the secondary school (these were known as secondary grade training schools). Both provided a two years' course. In Bombay, the system of intermittent training spread over three years was abolished in 1938 and a continuous training of two years was provided for all middle-passed teachers. It may also be pointed out that Bombay did not provide any separate training course for matriculate teachers (as in Madras), although a number of matriculates were working in its primary schools. These were admitted to the same course as provided for the middle-passed teachers but were exempted from the first year studies. In Bengal, owing to the spread of middle school and secondary education, the general education of primary teachers had been considerably improved, but the duration of the training course was only one year. The size of the average training institution also was very small (about 30 to 40 trainees), an obvious remnant of the system of *guru* training schools. Moreover, the Province also had a system of attaching 'training classes' to high schools. Bihar and

Assam followed the Bengal model and in 1946-47 they had small training institutions which admitted middle-passed teachers and provided a course of one year only which combined some pedagogic instruction with a good deal of further general education. In the Central Provinces and Berar, as in Bombay, the system of intermittent training was abandoned and a continuous training of two years was provided. In U.P., primary teachers were trained in three types of institutions—Normal Schools, Central Training Schools and Training Classes. In the last two types, the course of training provided was of one year for Primary Teachers' Certificate Examination while in the former, it was for two years leading to the Vernacular Teachers' Certificate. The minimum qualification for admission to the Normal Schools was a pass in the Hindustani Final Examination, but since 1938, at least 50 per cent of the candidates were required to have passed the Matriculation examination. In Orissa, the duration of the training course was two years and the minimum qualification for admission was a pass in the middle school examination. Punjab provided a two years' continuous course of training after the middle school and it also permitted 'training units' attached to ordinary secondary schools.

32. One important event of this period deserves mention. Prior to 1901, the average entrant to the training institution had completed only his primary school; and consequently the status of the training institution was more or less that of a middle school. Between 1901—21, with the expansion of middle school and secondary education and improvement in salaries of primary teachers, the level of general education of the entrants to the profession began to improve. The entrant to the training institutions now had at least completed the middle stage of education and about 9 per cent of them had even completed the secondary stage. The status of the training institution was, therefore, automatically raised and it now became equal to that of secondary schools in terms of the qualifications expected of the teacher educators, their scales of pay, the qualifications and scale of pay of the principal and such other matters.

Education of Elementary Teachers in India (1947—61)

33. Education has made unprecedented progress in the post-independence period; but for several reasons, it has not been able to keep pace with the aspirations of the people. This general statement applies to elementary education as well as to the training of elementary teachers.

34. To begin with, it may be admitted that the progress of elementary education in terms of numbers during the last 14 years can only be described as phenomenal, if it is compared with that in the earlier periods. For instance, the number of primary schools increased from 1,72,661 in 1947 to 3,42,000 in 1961—an increase of about 100 per cent; the enrolment in classes I—V increased from 141 lakhs to 343 lakhs—an increase of about 143 per cent; the total number of primary teachers has increased from 4.06 lakhs to 9.10 lakhs—an increase of about 136 per cent; and the direct expenditure on primary education increased from Rs. 18.48 crores to about Rs. 75 crores—an increase of about 400 per cent. At the middle school stage, the enrolment in classes VI—VIII increased from 20.4 lakhs in 1947 to 62.9

lakhs in 1961; the number of teachers increased from about 75,000 in 1950 to 3,00,000; and the direct expenditure on middle schools increased from Rs. 4.8 crores in 1947 to about Rs. 40 crores. On the whole, the increase at the middle school stage is even proportionately greater than that at the primary stage from every point of view. As compared with the growth in the past, this is obviously the period of rapid expansion in primary education. In the same period, the expansion in secondary and university education has been even more rapid.

35. The second important gain of this period is the improvement in the remuneration of primary teachers. As stated earlier, the total remuneration of a primary teacher was Rs. 387 a year in 1946-47. In 1958-59, the latest year for which the figures are available, this stood at Rs. 723 at the primary stage and Rs. 1,005 at the middle school stage, and it is estimated that they would have increased to about Rs. 800 and Rs. 1,100 in 1960-61. Even allowing for the increase in the cost of living (the cost of living index is 124 in 1960-61, the base year, 1949-50, being 100), the gain in the teachers' salaries is considerable though much still remains to be done.

36. This period has also witnessed a steady enlargement of the objectives of elementary education, its duration and content. Prior to 1947, elementary schools were still very largely dominated by the objective of preparing students for the secondary schools; and in spite of the reforms that began in the early years of the present century, they were largely book-centred and formal in their methods of teaching. The concept of basic education, now adopted as the national pattern of education at the elementary stage, has set in motion revolutionary changes not only in the content of elementary education but even more in the attitudes and approach to it. The objects of basic education were defined, not in terms of the requirements of the secondary school, but in terms of pupil's needs and his preparation for social responsibility for life. Its duration was now extended to cover an integrated course of education spread over eight years and this minimum education had to be provided for every child on a 'free and compulsory' basis within a specified period. The original idea was that the content of this course would be equivalent to that of the Matriculation minus English. Even though study of English has now been included and the content in the different subjects does not approximate to the old Matriculation standards, there is no doubt that the integrated eight-year course of basic education provides a standard of instruction much higher than that offered by even the most advanced elementary schools of the pre-independence period. Another significant change brought about by basic education was through its method of teaching, with its emphasis on purposeful creative activities which should be related intimately with the physical and social environment of the child and with his education in a useful craft.

37. If this revolution in elementary education is to be realised, an equally significant revolution is obviously necessary in the education of elementary teachers. The implications of basic education for teacher training institutions may be stated as follows:

- (1) There must be a very large expansion of facilities for pre-service training of elementary teacher and also an adequate provision for their in-service training.

- (2) The curriculum of teacher training institutions should be greatly enlarged and the theory and practice of basic education included in it. Every teacher in training should have adequate proficiency in crafts, so that he may develop an insight in their creative and educational possibilities.
 - (3) In order to provide adequate opportunities for community living on the campus of training institutions, they should be residential both for teachers in training and members of the instructional staff.
 - (4) The instructional staff of the training institutions must be specially prepared and trained in the methods and techniques of basic education.
38. During the period under review, though there have been no revolutionary changes in teacher education, certain trends of a favourable character have gained in strength.
- (a) There has been a gradual upgrading of the level of general education of the new entrants to the profession. The Sargent plan had proposed the target that every elementary teacher should have completed the secondary school. In view of the large expansion of secondary education since 1935, it was expected that this reform could be implemented within 10—15 years. Though this hope has not been fully realised, the percentage of matriculate teachers is continuously increasing. In 1946-47, only 8.8 per cent of the teachers in primary schools and 44.7 per cent of the teachers in middle schools were matriculates. In 1958-59, these percentages had risen to 30.5 and 50.9 respectively.
 - (b) There has also been a considerable expansion of training institutions for elementary teachers. The total number of training institutions increased from 649 in 1946-47 to 782 in 1950-51, 930 in 1955-56, and 973 in 1958-59. Similarly, the enrolment of these institutions increased from 38,773 in 1946-47 to 69,416 in 1950-51, 83,467 in 1955-56, and 86,384 in 1958-59. During 1959-60 and 1960-61, the Government of India instituted a Centrally sponsored scheme under which grants-in-aid, on a 100 per cent basis, were given to State Governments for expanding facilities for the training of elementary teachers. It is estimated that there would be about 1,300 training schools for elementary teacher in India in 1961 with a total enrolment of about 1,20,000 students. As compared to 1946-47, this represents a very great advance indeed. But it must be remembered that even this order of increase has failed to keep pace with the expansion of elementary education. One can only say that it has helped to prevent things from getting worse.
 - (c) The Sargent plan had recommended a minimum duration of two years for the pre-service training of elementary teachers. The gains in this direction have not been substantial. It has not yet been possible to increase the duration of the training course to two years in all parts

of the country; and even today, several States and Union Territories provide a one-year course, not only for matriculates, but for "middle pass" teachers as well. As the plans stand at present, the duration of the course should be raised to two years in all parts of the country by 1956.

39. The financial allocations for teacher education have not been proportionate to the increase in the needs. The total expenditure on primary education increased from Rs. 18.5 crores in 1946-47 to Rs. 63.6 crores in 1958-59. In the same period, the expenditure on training institutions increased from Rs. 91 lakhs to Rs. 255.7 lakhs, that is to say, while in the beginning of the period it was 4.9 per cent of the expenditure on primary education, it fell to 4.0 per cent by 1958-59.

Conclusions

40. This review of the development of teacher training for teachers of elementary schools in India during the last hundred and sixty years highlights certain problems which have an important bearing on the planning of teacher education in future. These can be summarised as follows :

- (1) The crucial problem is the remuneration of elementary teachers providing as it does an index of the kind of abilities which are drawn into the profession. At the opening of the nineteenth century, the average remuneration of a teacher in the indigenous elementary school was only about Rs. 60 a year. By 1881-82, this had risen only to Rs. 89 a year and even by 1901-02, it was only Rs. 91 a year. The nineteenth century, therefore, did not do much justice to the primary teacher. In the present century, there has been a steeper rise in his wage—from Rs. 91 in 1901-02 to Rs. 174 in 1921-22, Rs. 387 in 1946-47 and about Rs. 800 in 1960-61. It must be remembered, however, that a very large part of this increase is offset by the rise in the cost of living. On the whole, the primary teacher continues to be a poorly paid public servant, that his wage has no relationship either to his qualifications or to his responsibilities and that it has not kept pace with either the rise in prices or the remuneration of public servants in other comparable categories. By and large, this is also true of the teachers in the middle schools, although their salaries have been a little better.
- (2) The general education of the elementary teacher has been determined, partly by the remuneration offered and partly by the level of development of middle school and secondary education in the country. Prior to 1870, the average general education of elementary teacher was the completion of the primary school only. By 1921-22, middle school education had expanded considerably and more and more "middle-pass" persons took to the teaching profession in the primary schools. This was further facilitated by the improvement in the teachers' remuneration. By 1960-61, secondary education had expanded immensely and the remuneration of the elementary teacher also had been raised still further. It was, therefore, now possible to

recruit matriculates for teaching in elementary schools in fairly large numbers. But it has not yet been possible to restrict the recruitment of elementary teachers to matriculates only.

- (3) The training programme in India has so far been very largely of a "remedial" character in the sense that it has had to concentrate on remedying the defects in the general education of the teacher. The proper place to give such additional education to the teacher should be an institution of general education. But when that is not possible for some reason or the other, the task is taken upon themselves by the training institutions. Its influence on the attitude to professional education has not been entirely favourable.
- (4) By and large, the professional education of elementary teachers has not yet come into its own. Prior to 1901-02, the value of pedagogical training was not recognised at all and what went under the name of 'training' at the time was mostly further general education. The programmes of teacher education were emphasised between 1901—1921; but there was a sliding-back between 1921 and 1947 and the momentum thus lost has not been made up so far.
- (5) The isolation of the education of elementary teachers from that of secondary teachers has been another weakness of the Indian system. The history of teacher education in advanced countries shows that these have come closer together and that the effectiveness of the programme has increased in proportion to the extent to which these have come together. In India, elementary education stood in a class by itself and secondary and higher education were grouped together because of a common medium of instruction. This separation between elementary and secondary education also led to the separation of the education of elementary and secondary teachers in water-tight compartments. The influence of the precedents from England also helped this separation. But while in England, the education of elementary and secondary teachers is now coming closer through the Institutes of Education and the Area Training Authorities, no comparable step has been taken in India.

CHAPTER THREE

THE PRESENT SITUATION—AN APPRAISAL

41. We have in the previous chapter presented an account, necessarily brief, of the developments through which teacher training has passed, with a view to providing the historical background against which the present position is to be appraised. Teacher training as it obtains at present is essentially nothing more than a continuation of the patterns set more than a generation ago. The only exceptions are to be found in the institutions which have tried to orient their training programmes to the needs and purposes of basic education. By and large, the training institutions have functioned either as continuation schools trying to give to student teachers a little more subject content than what they would be required to impart to their pupils or as trade schools taking the student-teachers through a fixed routine at the end of which they would have got "the tricks of the trade". In terms of supply of trained or "certificated" teachers, there has been a persisting gap between the output and the requirements, the latter keeping well ahead of the former even though expansion of primary education in the past was more or less evenly paced. The whole system was based on a half-hearted belief in the power and efficacy of professional education for teachers. We cannot say with conviction that this attitude is now a thing of the past. There are not a few who still hold that what a teacher needs is a good knowledge of the subject-matter and that his professional training is, at the most, an embellished investment which could await better times.

42. What is needed now is nothing short of a "break-through" in teacher education if we are to achieve even a few of the objectives of universal compulsory education up to the age of 14. Neglect of teacher education at this juncture would mean a continuing accumulation of problems which foresight and timely action could avoid.

43. The teacher in a primary school today has to deal with problems which qualitatively are different from those his predecessors had to face thirty or even fifteen years ago. There is first the phenomenal expansion of primary education (and the pace will rise steeply as the goal of universal compulsory education is reached). In consequence, and inevitably, the classes have increased in size; one- and two-teacher schools have increased in number, and the children in the schools represent a more various and heterogeneous socio-economic and environmental background. Even if the school had nothing more to give than drill in the mechanics of reading, writing and numbers, the teacher's task would require a greater degree of skill than untrained endowment could be relied upon to provide; and the school of today has to give much more than this.

44. One of the most significant contributions of modern educational thought lies in the insight that the earlier we begin to cultivate the desirable attitudes and behaviour patterns, the more enduring will be their influence in the development of the pupil's personality. In particular, education for democratic living in forms suited to the

level of the child's mental and emotional development has to begin with the first steps of schooling. In realising the new goals of social policy which the country has set before itself, the responsibility and contribution of the elementary school as an agent of social change are no less important than those of any other class of institutions. It is perhaps well to bear in mind that by far the largest proportion of children who enter school leave it on conclusion of five or eight years of education; this is all the education that they will receive. In another eight to ten years' time they become active members of the community. Within the space of a generation they would be the majority members in the active section of the whole population. What the schools give them and what they carry with them from the schools should be of vital importance. An untrained teacher teaches only in the way he himself was taught. He can only transmit, he cannot transform. It would be an exceptional circumstance if the school in his charge were to absorb the climate of a changing society. Proper training of teachers on whom depends how effectively a school functions is therefore at the very core and centre of any educational programme which seeks to invest the schools with a social responsibility.

45. The tasks which the elementary school of today has to perform are much more complex and exacting than those conceived for it in the past. We may refer to two main influences. First is the expanding variety and range of its essential programmes such as are represented by the concept of basic education—craft as a creative medium of education, closer articulation with the social environment, and the emphasis on the development of the child's total personality in its aesthetic, emotional, social and physical aspects. Even the teaching and learning of the fundamental subjects, reading, writing and the language of numbers, have to be reoriented through improved methods and objectives if the present all too glaring inadequacies and wastage are to be removed. The second influence is transmitted to the elementary school by what is happening at the upper stages of education. The pressure of the overriding need to assimilate in the educational programmes the new dimensions which the corpus of knowledge is acquiring with such rapidity has added subjects and areas in the programme of elementary school which were barely known to it before. The curriculum of the elementary school is coming increasingly to be based on the claim that "any subject can be taught effectively in some intellectually honest form to any child at any stage of development". Hence the importance of such new concepts as general science and social studies in the curriculum of the elementary school. These influences are leading the elementary school inevitably though tardily, towards enriched and exacting programmes, which cannot be dealt with adequately except by teachers who have been trained to understand and deal with them. It is utter waste, from every point of view, including financial, if the secondary schools are forced to do the work which should have been done in the elementary schools and the universities should be doing the secondary schools' work. This is, by and large, the present position. We cannot conceive of any single measure which would contribute more to bringing the elementary school nearer its proper functions than the training and supply of teachers.

46. How does teacher training as it is today stand in relation to what the primary schools have to do ?

For the appraisal of the present situation, we have drawn upon the results of the survey of training institutions which was conducted by the Ministry of Education in 1959-60. A detailed questionnaire was issued to all training institutions for elementary teachers and replies were received from 873 institutions out of 1,081. The results of the survey have been published as an Annexure to the *Report of the First National Seminar on the Education of Primary Teachers in India*. A comparative study of the syllabuses in use in the institutions (and there were as many as thirty different syllabuses) was also made and is appended to the above Report. We do not consider it necessary to go over the same ground and offer detailed description of the inadequacies from which the present system suffers. We may briefly indicate the main findings.

47. The supply of trained teachers is not correlated to requirements over any period of time. In one State the supply has been larger than the requirements leading to unemployment of trained teachers. In other States, the supply has fallen far short of the needs, and additional teachers required for the expanding programme of primary education have been recruited from untrained persons. The training institutions have had to reserve the greater proportion of places for the untrained teachers in service while new entrants to the profession have continued to be drawn from untrained persons. This glaring and persistent imbalance between supply and need seems to have fixed itself as a permanent feature of the present situation.

48. The location of the training institutions is more fortuitous than planned. As early as 1882, the Indian Education Commission had recommended that the district should be taken as a unit for the training and supply of elementary teachers. This salutary advice holds good even today. Although there are nearly 1,100 institutions in the country (which gives an average of about 3.5 institutions per district), there are quite a few districts which have no training institutions at all, others have only one or two institutions while some have as many as 7 to 20. The distribution of training institutions as between urban and rural areas is also similarly unbalanced, a disproportionately large number being located in urban areas. It is desirable that teachers of primary schools should receive their professional training in an environment which is similar to that in which they would be called upon to work later on. The number of training institutions for women teachers is also far short of requirements. Since the policy is to encourage a larger number of women to enter the profession, it is essential that the facilities for training them should be considerably expanded.

49. Little attention seems to have been given to planning a training institution to an optimum size. The range of differences from State to State, and even from one institution to another, is unjustifiably large, being 20 places at one end of the scale and 300 at the other. It is found that very small institutions are poorly staffed and cannot offer the variety of specialised teaching that is essential for a good teacher education programme. The per capita cost is also higher.

50. It is of vital importance that the teacher of primary school should have a good background of general education. He must have at least completed secondary education. The present system has failed to take advantage of the opportunities of upgrading the requirements for general education which the expansion of secondary education in the country has created. The present output of secondary schools is adequate to ensure a regular supply of teachers for the primary schools. In spite of this, teachers for the primary schools are being recruited from those who have only completed the junior high school. In some States preference is given to a "middle pass" candidate over a matriculate because of the lower scale of pay given to the former. As a device for reducing the total cost of elementary education, it is neither educationally justifiable nor financially defensible since it omits from consideration the infructuous expenditure involved in giving sub-standard education. The only sectors in which recruitment of non-matriculates can be justified as a temporary expedient are, women teachers, teachers for remote areas and teachers for the tribal people.

51. As important as the general education of the prospective primary school teacher is the character and duration of the professional education given to him. The present policy, if such it may be called, with regard to the duration of professional education is highly unsatisfactory. A statement of the existing position in this regard in the different States is given below.

Andhra Pradesh. There is no uniformity in this regard. For freshers, the training course is of two years' duration; but for teacher-candidates in the Telengana area and for secondary-grade trainees in Andhra area, the duration of the course is one year.

Assam. The duration is one year for teachers of junior basic schools. In the case of teachers for senior basic schools, it is one year if the teacher has passed the Matriculation examination besides the normal school course; but if he is only matric, the duration of training is two years.

Bihar. The existing duration of primary teachers' training is two years (both for freshers and teachers). But a separate course of six months' duration is arranged for teachers with seven years' experience.

Gujarat. It is two years for the Junior Certificate Course for those who have passed the Primary School Certificate Examination. For the Senior Certificate, duration of the course is two years.

Jammu and Kashmir. It is one year after Matriculation. In the case of middle-passed women candidates also, it is one year.

Kerala. Two years' duration for all.

Madhya Pradesh. One year training course for all except in Mahakoshal region where it is of two years' duration.

Madras. Two years for both junior basic and senior basic.

Maharashtra. For matriculates, (i) 2 years for Senior Certificate; and (ii) one year for Junior Certificate. For Middle passed, two years for a Junior Certificate.

Mysore. For S.S.L.C's it is a one-year course. For non-S.S.L.C's it is two years' course.

Orissa. Two years for all whether matriculates or non-matriculates.

Punjab. Two years for matriculates.

Rajasthan. One year for matriculates.

Uttar Pradesh. Two years' course.

West Bengal. (a) One year for a primary training school. (b) One year in a junior basic training college followed by six months of actual work of supervised teaching in a school and a completion (residential) course of one month.

Himachal Pradesh. One year.

Delhi. Two years.

Tripura. One year.

Manipur. One year.

Pondicherry. Two years.

52. Any person who is familiar with the daily programmes of a training institution working a one-year course would agree readily that it is merely "surviving by hurrying". There is abundant evidence furnished by the experiences of the instructional staff and the teachers in training that this course is infructuous, ineffective and cannot possibly produce teachers who can handle the problem of our primary schools.

53. The content of the training courses and its presentation are mostly a reproduction in a watered-down form of the training courses for secondary school teachers. The only qualification prescribed for the instructional staff of the training institutions is a Bachelor's degree in Education, which is designed mainly from the point of view of secondary schools. The training courses therefore tend to be conducted in a setting which is far removed from the realities and needs of the primary schools.

54. At no point are the findings of the survey more disconcerting than in its disclosure of the physical conditions in which most of the training institutions in the country are working. Table I (on the next page) sets out the information in this regard. The Report of the Survey states—

"In respect of tuitional buildings, most of the institutions in the States of Assam, Bihar and Punjab are housed in their own buildings. In contrast to this, most of the institutions in the States of Uttar Pradesh, Maharashtra and Madhya Pradesh are accommodated either in rented buildings or some makeshift arrangements have been made with other educational institutions.

"The position regarding libraries is not satisfactory in a number of States. In the State of Punjab, 85 per cent of the institutions have library facilities while in the States of Bihar and Maharashtra 28 per cent of the institutions have such facilities. The position in the States of Orissa and West Bengal in this respect needs a lot of improvement—in the former only 37 per cent and in the latter 43 per cent of the institutions have library facilities.

"The position regarding laboratories shows a very unsatisfactory state of affairs. In the Punjab, 72 per cent of the institutions have

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TABLE I : FACILITIES AVAILABLE IN TRAINING INSTITUTIONS (Percentages only)

Sl. No.	Name of the State	Tuitional Buildings (own)	Libraries	Laboratories	Craft Sheds	Sanitary arrangements	Practising schools (own)	Hostels (own)	Staff Quarters
1.	Andhra Pradesh	65	77	30	76	96	76	55	20
2.	Assam	100	55	7	47	67	93	100	65
3.	Bihar	91	82	5	25	91	80	98	27
4.	Gujarat	49	75	59	81	86	58	50	13
5.	Jammu & Kashmir
6.	Kerala	78	56	15	51	85	69	30	8
7.	Madhya Pradesh	36	74	17	61	60	26	43	7
8.	Madras	74	75	28	51	93	64	70	18
9.	Maharashtra	32	82	48	88	88	68	30	8
10.	Mysore	44	76	44	46	82	67	40	6
11.	Orissa	59	37	—	40	48	24	65	25
12.	Punjab	93	85	72	69	93	79	72	28
13.	Rajasthan	68	59	26	57	50	29	40	10
14.	Uttar Pradesh	21	61	39	71	72	100	20	10
15.	West Bengal	72	43	4	13	76	77	71	40

Information not available.

laboratories, in Gujarat 59 per cent and in Maharashtra 48 per cent. As compared to these percentages, no institution in Orissa has a laboratory. Only 4 per cent in West Bengal, 5 per cent in Bihar, 7 per cent in Assam and 15 per cent of the institutions in Kerala have laboratories. In this age when teaching of science is being given so much of emphasis, it seems essential for every training institution to have a laboratory of its own.

"As regards craft sheds or rooms, most of the institutions in West Bengal and Bihar and more than half in Orissa, Mysore and Assam are without them. It will be noted that the analysis of the questionnaire did not make distinction between Basic institutions and non-Basic institutions as both the types are still in existence in most of the States. It may be that the position, as depicted in these tables, does not convey the correct picture regarding basic training institutions.

"The position regarding sanitary arrangements present a satisfactory picture in most of the States. The position in the States of Orissa, Rajasthan and Madhya Pradesh, however, needs improvement.

As regards practising schools, all the institutions in Uttar Pradesh have such schools of their own. The position in Assam, Bihar, Punjab, West Bengal and Andhra Pradesh is also satisfactory where more than 75 per cent of these institutions have this facility available. In contrast to this, 24 per cent of the institutions in Orissa, 29 per cent in Rajasthan and 26 per cent in Madhya Pradesh have the facility.

"With the exception of Assam and Bihar, where almost all the hostels are located in their own buildings, the position in other States is not satisfactory. In the States of Kerala, Madhya Pradesh, Maharashtra, Mysore, Rajasthan and Uttar Pradesh, less than half the number of the institutions have their own buildings. In Uttar Pradesh, Kerala and Maharashtra, the percentages of institutions having their own buildings are 20, 30 and 30 respectively.

"The position of quarters for the members of the staff of the training institutions is very unsatisfactory in most of the States. In Assam, 65 per cent of teachers have residences available to them and in West Bengal 40 per cent. In contrast to these only 6 per cent teachers in Mysore, 7 per cent in Madhya Pradesh 8 per cent in Kerala, 10 per cent each in Rajasthan and Uttar Pradesh and 13 per cent in Gujarat have this facility available."*

55. We have in the preceding paragraphs drawn attention to the findings of the Survey in regard to how the training programmes are actually operating. We should like to refer also to those programmes which today are considered essential for teacher education but which are conspicuously absent in the present system.

56. First and foremost is the programme of in-service education. No programme of pre-service education, however good, can meet the needs of a teacher for all the 30 or 35 years of his service. The social situations are changing fast; educational techniques are being continuously revised; and the boundaries of knowledge are widening very

*Report of the First National Seminar on the Education of Primary Teachers in India, Ministry of Education, pp. 114—116.

quickly. A teacher, therefore, gets out of date very soon unless he makes a continuous effort to keep himself abreast of the times and unless he is assisted in this endeavour through organised programmes of in-service education. The need and the value of such in-service education becomes easily apparent through comparison with organised industries and the practices adopted by advanced countries in teacher education. In every industrial undertaking, the significance of in-service training is now realised and every modern industry incurs a good deal of expenditure on the in-service training of its workers with a view to improving their efficiency and raising the standards of production. This principle is even applicable with greater force to education. In all the advanced countries of the world, continuous and intensive programmes of in-service education are organised and care is taken to see that the teachers know and use the latest available techniques of teaching. It is this in-service education which is largely responsible for the maintenance of standards and for the progressive character of the educational system as a whole. In India, however, hardly any steps have been taken so far to provide in-service education for teachers. There is probably one exception to this general statement. The inspecting officers of schools are required as one of their duties to convene periodical meetings of teachers at centrally selected schools. The business transacted at these meetings includes discussion of educational problems, general lectures, giving of demonstration lessons, and such other measures as would help the teachers to improve the quality of their work. Some attempt in this direction is made by inspecting officers and week-end meetings of small groups of teachers lasting for about a day are often held. But the coverage of these meetings is not very large and the activity is so sporadic and unorganised that its ultimate results are not appreciable. In spite of this small provision, therefore, it would still be correct to say that programmes of in-service education for elementary teachers hardly exist in India at present nor is there any administrative machinery to operate a programme of in-service education systematically and as a part of a planned effort to raise standards.

57. Occasionally attempts have been made to create an *ad hoc* machinery for the orientation of teachers. An example is provided by the programme of orientating elementary teachers to community development. Since the programme of community development was new, it was obviously necessary to orient the elementary teachers to it in order to bring about a closer relationship between the work done in the school and the general reconstruction programme going on in the community. It was decided to constitute peripatetic teams who would move from place to place, gather 40 or 50 teachers together in a camp of one month, and orient them to the community development programme. The members of the peripatetic teams were selected; they were themselves trained in a short course organised for the purpose; and were put on intensively to work. In spite of all that could be done, however, it was found that the machinery would not be able to orient more than 50 elementary teachers in a district by the end of the Second Plan!

58. The same difficulty is facing two other programmes, orientation of elementary teachers to basic education and education in

health and nutrition. In the absence of a permanent machinery for in-service education, some *ad hoc* arrangements are made which cost more and yield inadequate results.

59. Closely allied to in-service education and as a matter of fact, an aspect of it, is the need to provide active encouragement and suitable facilities to elementary school teachers for self-education. The most important criterion to judge the effectiveness of pre-service education is just this: whether it creates in the teacher in training the desire for continuous learning. To the extent this is done, 'training' is transformed into 'education'. The existing system provides no incentives for the teacher of primary schools to better his academic and professional qualifications; no out of turn reward recognises his effort. The rules for granting study leave are applied with discouraging rigidity. We are still far from the system where opportunities for self-education would be provided in a form sufficiently attractive to overcome even indifference and complaisance.

60. Another great deficiency in the present system is the absence of fundamental research in the teaching of the different subjects of the curriculum at the elementary stage and in problems of elementary education. Educational research, in itself, is still in its infancy in this country. But most of the research that is being done at present is mainly concerned with the problems of secondary education or mental testing. Curriculum construction, the methodology of teaching the different subjects at the elementary stage, and particularly the teaching of reading and arithmetic to the beginners, the psychology of child development, the organisation of primary schools, the different problems of primary education—these are very significant areas of research if the teaching in the elementary schools is to be vitalised.

61. The responsibility of a training institution for extension work has not yet been developed. Extension work is the link between the problems of school education and the expertise of the training institution and the research workers. This vital link has yet to be forged for the training institutions for elementary teachers.

62. While the number of training institutions has doubled itself in the course of the last fifteen years, no adequate organisational machinery has yet been devised to deal with the problems of teacher education. The organisation for preparing the curriculum of the training institutions, their supervision and inspection and the methods of evaluation continue to be the same basically as they were when there were only a few training institutions in the country. There is insufficient recognition of the fact that an increase in the sheer size and number calls for a qualitatively different type of organisation.

63. On the basis of the findings of the Survey and our own experiences, we have tried in this chapter to describe the main inadequacies of the present system. In the succeeding chapters we present our recommendations on the action that is urgently required if teacher education is to make the contribution, of which it alone is capable to the better education of the children of the nation.

CHAPTER FOUR

PRE-SERVICE EDUCATION OF THE TEACHER

64. We should like to reiterate what we consider the central theme of our recommendations: that no other single factor can make such a vital difference, for the better, as a proper system of teacher education and that a "break-through" here is not only urgently necessary but is also immediately feasible.

65. We shall consider first the question of supply of trained teachers. We have referred earlier to the persisting gap between the supply and the requirements. It should be the aim of our policy and endeavours that within a prescribed period the output of trained teachers on the basis of a two-year training course should be equal to the needs of recruitment.

66. This would involve an immediate expansion of training places (the magnitude of this expansion is indicated by us later in this chapter), which in turn would raise the immediate question of cost. We propose that the outlay required for the programme should be estimated bearing in mind two important considerations. First, the present position does not represent any saving in costs but only a deferment of the expenditure which ultimately has to be incurred. The teachers will have to be trained in any event. By taking in untrained teachers now, we are unwisely accumulating the charge on the future, which would have to be paid off at a cost higher than that which would be incurred now. Secondly, an untrained or inadequately trained teacher means a higher rate of wastage, and wastage is infructuous expenditure. As the classes become bigger and bigger and their population more heterogeneous in terms of ability and motivation, the rate of wastage and stagnation would rise unless there are trained teachers to deal with the situation. Even if there were no other cogent reasons except financial to reorganise the programme of teacher education, we would feel ourselves fully justified in making the recommendations we do.

Quantitative Aspects of the Problem

67. First of all, it is necessary to have some idea of the magnitude of the problem that will have to be faced in the sector of pre-service training of elementary school teachers during the next 15 years. This can be done if we estimate (a) the backlog of untrained teachers that would still remain in service at the end of the third Plan; (b) the probable annual requirements of additional teachers between 1966 and 1976; and then compare the combined requirements under (a) and (b) with the provision of training facilities that would have been created at the end of the third Plan.

68. In Annexure I we append a note which sets out in detail the basis of our estimates regarding the annual requirements of additional teachers in the years to come. The estimates have been made for the whole country. It is necessary that similar estimates should be worked out by each State Government and Union Territory Administration.

69. In estimating the additional number of training places required (as distinct from the number of additional teachers), consideration would have to be given to :

- (i) the size of the backlog of untrained teachers and whether some measures can be adopted to reduce the number of untrained teachers without having to create permanent training places for all of them;
- (ii) the pupil-teacher ratio that should be adopted at this stage for estimating the number of additional teachers required; and
- (iii) optimum size of a training institution.

70. Before dealing with the above points we should like to consider an objection that is sometimes raised to expanding the teacher training facilities to the extent of the existing and projected needs, since the answer to this objection is also relevant to a decision on the above three points. It is very often argued that if facilities for teacher training are expanded to the full extent, there would be a large surplus created once the goal of free and compulsory education for all children up to the age of 14 is realised.

71. This argument, in our view, is not sound. In the first instance, the goal of free and compulsory education will be realised only by 1975. After that the actual requirements of teachers will, no doubt, be reduced to some extent but not to a degree that would make a large number of institutions surplus. We would then be faced with the problems of improving the pupil-teacher ratio both in the schools and training institutions. During the period of rapid expansion the pupil-teacher ratio inevitably goes beyond the limit that educational wisdom would prescribe. This is the position at present and it is likely to continue while the pressure of expansion lasts. Secondly, the need to lengthen the period of compulsory education and even to lengthen the period of training course for teachers would not be a remote possibility by 1975. Taking these facts into consideration we are fully satisfied that the estimates of additional training places should be based on the existing and the projected needs and the apprehension of creating institutions which 15 years later will become surplus is unsubstantial.

72. By the end of the third Plan it is estimated that there would be about four lakh untrained teachers in the primary and middle schools. It is necessary that some special measures should be devised for training these teachers. We recommended the following :

- (i) A substantial number of these untrained teachers would be above 35 years of age and would have put in a service of 10-15 years. Little useful purpose is likely to be served by sending them for a regular course of pre-service training. Their training should be undertaken through short-term in-service courses.
- (ii) For teachers below the age of 35 who have put in 5 to 10 years of service the pre-service training course should be of one year.
- (iii) Full-term training courses would be required for those untrained teachers who have put in less than 5 years of service and are below 35 years of age. The number of

additional training places would have to take account of these untrained teachers.

73. With such a big backlog of untrained teachers it is surprising that little attention has been given in this country to training teachers through correspondence courses, a device which has been used with outstanding success in all countries where it has been tried. Correspondence courses are particularly suited to the kind of problem we are considering. It would not involve taking away the teacher from his school for any length of time, or the arrangement of a substitute. We believe that the training of teachers of categories (i) and (ii) above can be undertaken effectively through correspondence courses, supplemented by some short-term courses mainly for practical work.

74. We recommend that a committee of experts should be appointed to work out the details of the correspondence courses in collaboration with the National Institute of Education and that a pilot project should be started in each State to try out this method. It may be expanded suitably in the light of the experience gained through the working of the pilot project.

75. It would be observed from the statement given in Annexure I that an important factor in estimating the requirements of additional teachers is the pupil-teacher ratio that we assume. As mentioned earlier the pupil-teacher ratio in classes VI to VIII has to be lower than that for classes I to V, because of the requirements of the school time-table. At the present stage of educational development and the pressure of expansion a higher pupil-teacher ratio is necessary, unavoidable and inevitable. We would not even look upon it as a necessary evil provided that the teacher who is to handle large-sized classes is properly trained. In our view, we should accept a pupil-teacher ratio of 45 for the age-group 6-14. This would mean that the pupil-teacher ratio in the lower classes is likely to be slightly more than 50 and for the middle classes slightly more than 40. We recommended this as a basis for working out the estimates of additional teacher requirements. As regards the level of enrolment which should be assumed for 1975-76, we believe that the level of enrolment for the whole country should be fixed only after the position has been examined in each State with reference to its particular conditions. Tentatively we would suggest that where the level of enrolment in the primary schools will be 60 per cent or above by the end of the Third Plan, the third assumption mentioned in the Annexure should be accepted, namely, 100 per cent enrolment in 6-11 age group and 100 per cent in 11-14 age group by 1975-76. Where the existing level of enrolment in the primary schools is less than 60 per cent, the second assumption is likely to be more realistic, namely, 100 per cent in 6-11 age-group and 75 per cent in 11-14 age-group by 1975-76.

Optimum Size of a Training Institution

76. We have referred earlier to the existing differences in the size of the institutions. There is a belief widely held that a training institution should not exceed an enrolment of 100. We have not been able to find any cogent reasons to support this. One of the factors that determine the size of a training institution is the availability of enough schools in the neighbourhood where supervised lessons can be

conducted by teachers in training. In the past such schools were limited in number, but this is no longer the case now. A pupil-teacher ratio of 15:1 can effectively cover larger enrolment than 100. We endorse the finding of the first National Seminar on the Education of Primary Teachers that "a teacher training institution should have four units or classes of 40 trainees each." The minimum size of a training institution should be 160, which with a two-year course would give an output of 80 teachers per year. We are satisfied that even an increase to 200 will not adversely affect the efficiency of the institution. Not the least of the advantages of an institution of this size lies in the fact that its larger faculty permits a greater range of specialised courses being given and there is also a greater variety of talents represented on the staff. From the point of view of cost also, this is desirable. It is, however, necessary to emphasise that the enlargement of an institution should not be made only in terms of bigger enrolment and more staff but also in physical facilities such as hostel places for teachers in training, library, craft workshops and lecture and tutorial rooms. The States should examine in detail the possibilities of enlargement with reference to their existing institutions.

77. We now consider the question of the expansion of training places necessary to meet the annual demand for new teachers. The first important consideration is the period within which adequate number of training places should have been provided so as to ensure that only trained teachers are recruited to the profession. The training course must be of two years' duration. To match the output with the annual intake and to achieve this within a prescribed period is the first essential thing in the "break-through" we have urged for teacher education. We recommend that this should be planned for achievement by 1967-68, the first year of the Fourth Plan, and steps to realise the goal should be taken from now.

78. The estimates given in Annexure I show that between 1966 and 1967, the number of additional teachers annually required will be between 155,000 and 179,000 (pupil-teacher ratio 45:1). This should be the "effective" annual output of the training institutions. To ensure this we would require between 341,000 and 393,800 training places, including an allowance of 10 per cent for loss through "wastage" (failures amongst trainees and loss due to their not joining the profession and other causes). As against this total requirement, the available training places in the country at the end of 1961 were only 120,000. The training capacity has to be increased by 300 per cent within the next five years, by establishing new training institutions and expanding the existing institutions or a combination of these two measures.

79. We recommend that each State Government and Union Territory Administration should immediately set up a Study Group to—

(a) work out detailed estimates on the lines indicated in Annexure I of the additional enrolment in the elementary schools up to 1975 and the additional teachers required annually;

(b) assess the size of the existing backlog of untrained teachers and prepare a detailed scheme for clearing the backlog. (The scheme

of the Government of Maharashtra in this regard which is in operation at present is given in Annexure III.);

(c) examine the possibilities of expanding the capacity of existing institutions;

(d) determine the additional training places which need to be created so that by 1967-68 the output on the basis of a two-year course should match the annual requirements;

(e) assess the requirements of teachers for the special categories e.g. women teachers, teachers for remote areas, teachers for tribal areas, etc.; and

(f) work out the estimates of the cost and the phasing of the whole programme. We hope that the Study Groups will be formed and start functioning immediately so as to complete their work by March 1963. The plans prepared by the Study Groups should be combined to form the overall plan for the country.

80. It is obvious that all States and Union Territories, with the possible exception of two or three, will have to establish new training institutions. It may also be necessary in quite a few cases to close down an existing institution which is quite unsuitable and establish a new one to replace it. The location of the new institutions and their planning would have to be done with great care. We recommend the following general principles in this regard :

(a) A district should be taken as the unit of planning and each district should be provided with as many training institutions as are required to meet the demand of elementary teachers within its area.

(b) Since 80 per cent of the population is rural, a proportionate number of training institutions should be located in rural areas.

(c) As the training institutions need practising schools of a fair size, a good location for a training institution would be a township with a population between 5,000 and 10,000. This will provide an adequate number of practising schools of the required size.

(d) The institutions should be so located that they would be easily accessible from all parts of the district. There is a proposal that each training institution should provide extension services to primary and middle schools within its neighbourhood. The location of training institutions should, therefore, be so planned that, when these services are started, it should be possible to cover most of the primary and middle schools in the district.

Cost of the Programme

81. With a view to taking immediate steps to implement this programme, it is essential, while planning the location of training institutions, to work out also the capital and recurring costs of the programme in detail. For this purpose, it is first necessary to prepare a blueprint of a training institution of an optimum size and also to work out its total cost both capital and recurring. We recommend that this should be one of the terms of reference of the Study Group. On the basis of this blueprint, the Study Group should examine the

present conditions in every training institution and prepare a rough estimate of the additional expenditure necessary for raising it to the size and level of efficiency visualised in the blueprint. This cost, along with the cost of establishing the new institutions, would give an idea of the total cost involved in the programme.

Minimum Qualifications for Admission to the Training Institutions

82. The nature of training and its quality depend very much on the educational and other background and the level of maturity which a trainee brings to the institution. These factors also play a vital part in determining the quality of education in the schools where the teacher in training will ultimately work.

83. During the last 15 years there has been a remarkable rise in the general educational qualifications of the teachers in the elementary schools. In 1946-47, the matriculates formed only 8 per cent of the cadre. Table II shows the increase that has been taking place.



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TABLE No. II
Number of Matriculate Teachers in Elementary Schools

Year	Matriculate teachers			Total number of teachers			Percentage of Matriculate teachers to total number of teachers			Increase in the number of Matriculate teachers	Percentage of increase in matriculates to total increase
	Men	Women	Total	Men	Women	Total	Men	Women	Total		
1949-50	62,306	12,821	75,127	505,346	91,417	596,763	12.33	14.02	12.59	—	—
1950-51	75,997	13,993	89,990	528,246	95,168	623,414	14.39	14.70	14.44	14,823	55.6
1951-52	84,477	16,712	101,189	550,978	103,232	654,210	15.33	16.19	15.47	11,199	36.4
1952-53	102,853	21,075	123,928	569,591	114,113	683,704	18.06	18.47	18.13	22,739	77.1
1953-54	127,118	25,360	152,478	606,215	121,340	727,555	20.97	20.90	20.96	28,550	65.1
1954-55	167,344	30,176	197,520	657,260	130,290	787,550	25.46	23.16	25.08	45,042	75.1
1955-56	195,393	34,735	230,128	698,732	140,911	839,643	27.96	24.65	27.41	32,608	62.6
1956-57	222,637	45,127	267,764	724,345	152,357	876,702	30.74	29.62	30.54	37,636	101.6
1957-58	243,262	50,692	293,954	750,124	164,188	914,312	32.43	30.87	32.15	26,190	69.6
1958-59	268,974	58,663	327,637	782,932	177,533	960,465	34.35	33.04	34.11	33,683	73.0

34. It will be seen that matriculates are being recruited in larger numbers. In 1950-51, the total number of matriculates recruited was about 14,563 (or 54% of the newly recruited teachers) out of a total recruitment of about 26,651. In 1958-59, the total number of matriculates recruited rose to 33,683 out of a total of 46,153, i.e. 73 per cent.

35. The output of high/higher secondary schools has reached a level which will ensure that practically all the recruitment requirements for the elementary schools can be met. A student takes his Matriculation at the age of 15-16. To recruit teachers for the training institutions at any age lower than this will mean admitting immaturity.

36. We recommend that, as soon as may be possible but not later, in any case, than 1965-66, the recruitment of teachers for the primary and middle schools should be only from those who have passed the Matriculation or equivalent examination. The recruitment of non-matriculate teachers may be permitted only for "special categories" such as women teachers, particularly for the rural areas, and teachers for the tribal and remote areas. The exception for even these special categories should not extend beyond a prescribed date, which we suggest should be 1971.

37. We further recommend that non-matriculate teachers already in service should be given liberal opportunities to pass the high school examination. The possibility of organising suitable correspondence courses for this purpose should be actively examined.

38. At the middle school stage it is desirable that more graduate teachers should be encouraged to enter the profession. The number of graduate teachers in the middle schools has been rising rapidly as the following table will show.

TABLE No. III
Graduate Teachers at the Elementary Stage

Year	Total Number of Graduate Teachers		
	Men	Women	Total
1949-50	4,239	1,275	5,514
1950-51	4,818	1,297	6,115
1951-52	5,684	1,542	7,226
1952-53	5,673	1,625	7,298
1953-54	7,906	1,977	9,883
1954-55	8,844	2,063	10,907
1955-56	11,083	2,436	13,519
1956-57	11,046	2,912	14,318
1957-58	12,767	3,489	16,256
1958-59	13,051	3,812	16,863

The trend which the above table discloses should be actively encouraged. It is also desirable that the Headmaster of a primary school with more than 250 children on the roll should have graduate qualification.

Duration of the Training Course

89. The most important change that needs to be introduced in teacher education is to extend in all States and Union Territories the duration of the training course to two years to be taken by those who have completed secondary education. A training institution has, first and foremost, to build up in the teacher in training those interests which will make learning a continuous process for him and to impart a sense of the philosophical and social values in the framework of which the educational process operates. There are, in addition, certain skills which have to be cultivated, not the least of which is a high degree of proficiency in crafts. Any person who has firsthand experience of the existing one year course cannot but admit that it is totally ineffective and produces at the most a certificated person and not a teacher imbued with a sense of vocation.

90. One reason why the one-year course has not been lengthened even in those States which recognise the need for doing so is the fact that such extension would reduce the output of trained teachers to half. As a matter of fact, there is a distinct tendency, which we cannot but deplore, to dilute the training course in various ways in an effort to increase the numerousness of certificated teachers. We cannot baulk facing the fact that the number of training places needs a very large expansion and that there is no other way of producing the required number of trained teachers, except through such an increase. The lengthening of the training course from one year to two years should, therefore, be planned in relation to the expansion of training places so that the output would not be reduced.

91. A question may be raised whether the students who pass out of the higher secondary course, which is one year more than the high school course, should also take a two-year professional course as recommended for matriculates. In our view, an additional year of schooling is no substitute for any part of a professional course of training. We recommend that, as early as possible and in any case, not later than the end of the third Five Year Plan, the duration of the training course should be raised to two years in all States and Union Territories.

92. We further recommend that for the special categories of teachers who are non-matriculates, the training course should be three years. There would be no objection if the training course of three years is divided into two periods, one of two years and the other of one year, the trainee being given a continuous pre-service training of two years in the first instance to be followed by a one-year course as in-service training.

Revision of the Syllabuses

93. There are at present over 30 different types of syllabuses in use in the training institutions. Most of the syllabuses have grown up by a process of accretion, new items being added in bits and patches without deadwood being cleared out. There is very little in these courses which relates directly to the specific problems of teaching in the primary classes. It is necessary that a model syllabus should be evolved which can serve as the general framework within which such adaptations as may be required to suit the conditions of

different States may be made. We recommend that this work should be undertaken by the National Institute of Education in collaboration with the representatives of the State Governments and selected Principals of training institutions.

94. It has been our endeavour in this Report to emphasise that the problems of elementary education have a distinct character of their own and that teacher education for the teachers of elementary schools should be reoriented to these problems. In this aspect of the matter the training of teacher educators and the instructional staff of the training institutions is of vital importance. The teacher educators have generally received their professional training in relation to secondary schools, supplemented by on-the-job experience as members of the inspecting staff or as teachers in training colleges. In our view this is not adequate preparation for a teacher educator who is to work in a training institution for elementary school teachers. It is, therefore, necessary, and we recommend, that special in-service training courses should be provided for them. We also hope that the universities would provide specialised courses at the M. Ed. level to prepare teacher educators for the training institutions. Such courses should cover :

- (a) Problems of elementary education;
- (b) Child psychology and child development for the age-group 6—14; and
- (c) Teaching methods and techniques suitable for elementary schools.

It would be also a distinct advantage if a person taking this specialised course becomes familiar with the methods of infant teaching.

Improving the Physical Conditions in the Training Institutions

95. It was pointed out in Chapter III that the existing physical facilities available in training institutions, such as buildings for classrooms, hostels, staff quarters, libraries, laboratories, land for the farm, teaching equipment, are most inadequate. It is necessary that immediate steps should be taken to improve the physical conditions in which the training institutions have to function. A blueprint of the minimum essential needs should be prepared. We hope that it would be possible to start work on improving the physical conditions of the training institutions during the third Five Year Plan itself. The Study Groups which we have recommended earlier should examine the existing position in each State and prepare development programmes with estimates of cost for the existing institutions.

CHAPTER FIVE

IN-SERVICE TEACHER EDUCATION

96. We have referred earlier to the total lack of any programme of in-service education for the teachers of elementary schools. We attach the highest importance to in-service education. A teacher needs renewal of his professional reserves as much as any other technician. But on-the-job experience, valuable though it is, cannot carry one beyond a certain point. The unduly long time-lag which intervenes between the origination of a new idea or technique in education and its incorporation in the school practices is explained by the inadequacy of opportunities for the teachers to keep themselves abreast with new ideas and developments in their profession. We feel that investment in in-service programme is so rewarding that a beginning should be made in the third Five Year Plan itself for developing a nation-wide network of in-service training programmes. The ultimate objective should be to give to every elementary teacher in-service training once in five years, the training being not less than of two months' duration. The in-service training programmes should consist of a variety of courses, some designed to familiarise the teacher with new developments in subject areas and others with new techniques and methods.

97. The in-service training programme, to be a permanent feature of the educational structure, has to be institutionalised. One way of doing this is to set apart some of the training institutions solely for the purpose of providing in-service education. The other method is to provide a special branch for in-service education in an existing training institution, the training institution thus providing both pre-service and in-service training.

98. For a two-month in-service training course to be given to every teacher once in five years, we estimate that the in-service training places should be equal to 4 per cent of the total cadre of teachers. These in-service training places should be planned with the district as a unit. Wherever the number of in-service training places required is sufficiently large to keep an institution fully engaged throughout the year, we would recommend the establishment of a separate institution and where the numbers do not justify a separate institution, an existing training institution can organise the in-service training programmes also and its staff should be augmented accordingly.

99. The in-service training programmes should be organised not only for teachers but also for headmasters and the members of the inspecting staff, the courses being designed to meet their specific needs.

100. We are glad to be informed that the National Council of Educational Research and Training has decided to establish 60 extension service centres in the training institutions for elementary teachers. A copy of the scheme adopted by the National Council is given in Annexure IV. These extension centres can form the

beginning of the network which we have suggested. The number with which the beginning is proposed to be made is, however, inadequate and we recommend that at least 240 centres should be established during the third Five Year Plan and that 50 per cent of the training institutions should be covered by the end of the fourth Plan.

101. The extension centres will serve to bring the training institutions directly in touch with, and make them feel responsible for, the schools and the teachers in their neighbourhood. At the same time, the teachers will have a venue where their professional problems and experiences can be considered and organised in an atmosphere free from the pressures of purely administrative decisions. The programmes of extension activities and in-service education cannot, however, grow in a purposeful way unless there is at the State level an agency which can coordinate these programmes, advise on the best methods of carrying them out and organise new techniques and ideas in a form adapted to our conditions.

102. We are glad to find that this essential link in the chain of extension and in-service activities will be provided by the scheme under consideration with the Ministry of Education and the National Council of Educational Research and Training, which envisages the establishment, in each State, of a State Institute of Elementary Education. One of its main functions will be to provide in-service training courses for teacher educators and the inspecting staff, but the Institute can and should also be developed as the central organisation for in-service programmes as a whole. We recommend that the State Institutes should be established as early as may be feasible and should be charged with the following functions :

- (i) to provide in-service training to teacher educators and the inspecting staff connected with elementary education. The aim should be that every teacher educator and inspector should receive in-service education in a course of three months' duration once every five years. The in-service courses should be adapted to the specific needs of different categories of teacher educators and inspectors and should be a combination of general and special programmes;
- (ii) to undertake studies, investigation in all problems of education, research in methods of teaching and the curriculum in elementary schools. These studies and researches will be mainly functional in character, designed on the one hand to tackle the problems presented by the teachers out of their day-to-day experiences, and, on the other, to evolve new techniques for dissemination amongst the teachers through the extension centres;
- (iii) to carry out periodic evaluative studies of the programmes of training institutions, extension activities and the progress of elementary education in general and of basic education in particular.

103. The programmes of in-service education in their various forms should be supplemented with adequate provision of incentives to the

teachers for professional growth or self-education. Unless the motivation for self-education is built up, even the programmes of in-service education will fail to make their mark. We, therefore, recommend :

- (i) The conditions governing the grant of study leave should be liberalised;
- (ii) Advance increments or higher scales of pay should be given to teachers who acquire higher academic or professional qualifications;
- (iii) The possibilities inherent in the correspondence courses should be examined with a view to providing to elementary teachers opportunities for acquiring higher professional qualifications. A beginning in this direction can be made through the State Institutes of Elementary Education; and
- (iv) the teachers who acquire higher qualifications should be eligible for promotion to the inspecting cadre and to the training institutions.

Production of Educational Literature in Indian Languages

104. One of the effective methods for raising the efficiency of teachers is through the supply of good educational literature. In a language like English, where this literature is available in plenty, it is easy enough for teachers to have access to new sources of information and generally to keep abreast of the latest developments in their professional field through books and journals. One of the main handicaps of the elementary teacher in India is that he does not have such literature in the Indian languages. It is urgently necessary to prepare educational literature in all the Indian languages which would be adequate in variety and volumes.

This literature will be in the form of :

- (1) Reference books;
- (2) Books of general education dealing particularly with the subjects which are of interest to the elementary teacher such as history, geography, science or mathematics;
- (3) Books on pedagogical subjects such as educational psychology, child development, mental testing, or comparative education;
- (4) Books dealing with teaching methods and techniques in elementary schools;
- (5) Periodicals; and
- (6) Brochures and pamphlets presenting in an attractive form some of the latest developments in the professional field so far as they are applicable to elementary education.

105. A task of this magnitude will require the cooperation of many agencies both at the State and the Central levels. Private enterprise has also a contribution to make, but in the circumstances as they

obtain at present, they contribute only to supplement what government agencies and the universities should do. The primary responsibility must be discharged under the auspices of such agencies as the National Council of Educational Research and Training and the State Institutes of Elementary Education. The organisations of teachers have a particularly important role to play and they should be encouraged in all possible ways to assume a share of this responsibility.



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CHAPTER SIX

TOWARDS A COMPREHENSIVE ORGANISATION FOR TEACHER EDUCATION

106. Teacher education at the elementary level is administered directly by the State Departments of Education. There are government managed as well as private managed institutions; recognition to the latter is given by the State Departments. The ratio of government to private institutions varies widely from State to State. In Madras, the numbers in the two categories almost balance each other. In Maharashtra, the majority are private institutions while in U.P. and Bihar there are very few private institutions.

107. When the number of training institutions was small, their administration and supervision presented no special problems; that could be done in the normal course of a department's work. The situation now is totally different; the numbers have increased and a big programme for further expansion and qualitative improvement has to be undertaken. Furthermore, the problems of teacher education at the elementary level touch on many points the problems of teacher education at the secondary level. While we are still far from the stage of development where we could envisage the training of teachers for the primary and secondary schools to be undertaken in the same institution, the need for co-ordination between the two stages is undeniable.

108. The programmes for the reform of teacher education cannot be implemented effectively through *ad hoc* measures. They must be supported by an adequate organisation. We are firmly of the conviction that the time has come when a permanent organisation should be created at all levels which would be charged with the responsibility for improving teacher education and which should be giving continuous thought to its problems.

109. To this end, we recommend that in every State there should be a State Council for Teacher Education, consisting of the Director of Education, representatives of the University Departments of Education, representatives of Principals of training colleges for secondary teachers, representatives of the Principals and teachers of training institutions, and non-official educationists. The Council should have powers to operate on funds placed at its disposal by the Government and should have an autonomous character. We envisage that the Council will deal with teacher education at all levels, pre-primary to secondary, and have the following functions:

- (i) To prepare programmes for the development of teacher education and supervise their implementation;
- (ii) To set standards for teacher education;
- (iii) To confer recognition on institutions which fulfil the requirements prescribed by the Council;
- (iv) To prepare the curriculum and syllabuses according to which the training programmes, both pre-service and in-service, should be carried out;

- (v) To conduct examinations and award Certificates and Diplomas;
- (vi) To arrange for the inspection and supervision of the training institutions recognised by it;
- (vii) To coordinate the training programmes and collaborate with other agencies in the State and outside in the furtherance of its objectives.

110. We have in our recommendation included the training colleges for secondary school teachers also. We believe that this recommendation does not infringe on the authority that the universities have in this sphere and it should be possible in the detailed working out of the proposals to provide suitable safeguards in this regard. The practice of the Indian Medical Council can serve as a guide to the working out of an arrangement whereby the educators for the profession—in this case the universities, the employers and the secondary schools—can be brought together in a fruitful partnership.

111. In most States there is still no separate officer responsible for the supervision of training institutions. In quite a few States the inspections are carried out by the District Inspector or the District Education Officer. Such inspections are good enough for administrative purposes but are inadequate if the inspection has to be more than a mere "check-up".

112. We recommend that every State should have a special officer (or any other suitable administrative machinery) whose whole-time responsibility would be for the programmes of the training institutions and that the annual inspections of the training institutions should be carried out by panels of experts who would be in a position to discuss the professional problems with the instructional staff and give them guidance.

113. We are glad to be informed that the National Institute of Education has decided to establish a Department of Teacher Education with the following functions :

- (i) To act a clearing house of ideas and information;
- (ii) To provide advanced level training courses in teacher education;
- (iii) To conduct research in various aspects of teacher education;
- (iv) To prepare instructional literature in Hindi and other regional languages for the use of training institutions; and
- (v) To provide consultative services to the States.

114. The Department of Teacher Education in the National Institute of Education will, we hope, develop as the apex of a countrywide organisation which would comprise the State Councils of Teacher Education, the State Institutes of Elementary Education, the Extension Centres and the training institutions.

Cost of the Programme

115. The detailed estimates of cost of the programme we have suggested in the Report, will have to be worked out at the State

level and then coordinated for the whole country. We may, however, give certain broad estimates to indicate the financial magnitude of the programme.

- (a) On the basis of such data as are available to us, we estimate that the non-recurring expenditure on establishing a new training institution is of the order of Rs. 3,000 per training place. Of the existing training places, 50 per cent are very much below standard and would need to be upgarded. The non-recurring expenditure on the total programme would, therefore, be of the order of Rs. 60 crores.
- (b) It is estimated that the recurring cost would be Rs. 750 per trainee per year. The total recurring expenditure would, therefore, be of the order of Rs. 18 crores.
- (c) The cost of the in-service training programme is estimated at Rs. 1,000 per training place (non-recurring) and Rs. 400 per trainee (recurring). The total cost of the in-service programme would be of the order of Rs. 34 crores.

116. The total recurring and non-recurring cost of the programme, both pre-service and in-service, might be of the order of Rs. 112 crores over a period of 10 years. In absolute terms these figures may look somewhat forbidding but we may point out that the total recurring cost on the programme of teacher education would be just about 5 per cent of the total direct expenditure on elementary education.

117. It is suggested that a beginning should be made in putting this programme into force by providing a sum of Rs. 20 crores in the third Five Year Plan. A sum of about Rs. 60 crores would be needed in the fourth Five Year Plan to expand this programme.

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CHAPTER SEVEN

SUMMARY OF RECOMMENDATIONS

In the three preceding chapters, we have made a number of recommendations relating to a programme of action for the improvement of teacher education at the elementary level. For convenience of reference, these have been briefly summarised in this concluding chapter.

I. Significance of the Programme

No other single factor can make such a vital difference, for the better, as a proper system of teacher education and a "break-through" here is urgently necessary. It does not really involve any 'additional' expenditure; all that it implies is the incurring of an expenditure, which will ultimately have to be incurred under any circumstances, but which would lead to great improvement in quality, if incurred in the near future. This programme should, therefore, receive high priority in the remaining period of the third plan as well as in the fourth plan. (Paras 64—66).

II. Clearing the Backlog of Untrained Teachers

By the end of the third Plan, there would be a backlog of about 4,00,000 untrained teachers in primary and middle schools. Special measures should be devised for training these teachers. We recommend the following :

- (i) A substantial number of these untrained teachers would be above 35 years of age and would have put in a service of 10—15 years. Little useful purpose is likely to be served by sending them for a regular course of pre-service training. Their training should be undertaken through short-term in-service course.
- (ii) For teachers below the age of 35 who have put in 5 to 10 years of service, the pre-service training course should be of one year.
- (iii) Full-term training courses would be required for those untrained teachers who have put in less than 5 years of service and are below 35 years of age. The number of additional training places would have to take account of these untrained teachers. (Paras 72—74)

Correspondence courses are particularly suited for clearing this backlog of untrained teachers. They would not take away the teachers from their schools for any length of time; and teachers in categories (i) and (ii) above may be trained effectively through correspondence, supplemented by some short-term courses, mainly for practical work. A committee of experts should be appointed to work out the details of the correspondence courses in collaboration with the National Institute of Education and a pilot project should be started in each State to try out this method. It may be expanded suitably in the light of practical experience.

III. Expansion of Training Facilities

A large expansion of training facilities is necessary and steps to secure this should be taken immediately. In estimating the requirements of additional places in training institutions for elementary teachers, a pupil-teacher ratio of 45 may be adopted. This would mean a pupil-teacher ratio of about 50 in classes I—V and of about 40 in classes VI—VIII. The target of enrolment to be reached by 1975-76 should be 100 per cent enrolment in the age-group 6—14 in all areas where an enrolment of 60 per cent or above has been reached by the end of the third Five Year Plan. In the remaining areas, the target of enrolment should be 100 per cent enrolment in the age-group 6—11 and 75 per cent in the age-group 11—14.

The minimum size of a training institution should be 160, preferably 200. This would secure efficiency as well as economy.

The facilities for teacher training should be so expanded that the annual output of training institutions would match the annual requirement of additional teachers. To achieve this equilibrium between the supply and demand for trained teachers is the most significant programme in the "break-through" we have urged for teacher education. The programme for each State and Union Territory should be so drawn up that this goal would be reached by 1967-68, the first year of the fourth Plan, and steps towards it should be taken from now.

(Paras 75—78)

IV. Appointment of Study Groups

Each State and Union Territory Administration should immediately set up a Study Group to—

- (a) work out detailed estimates, on the lines indicated in Annexure I, of the additional enrolment in the elementary schools up to 1975 and the additional teachers required annually;
- (b) assess the size of the existing backlog of untrained teachers and prepare a detailed scheme for clearing the backlog;
- (c) examine the possibilities of expanding the capacity of existing institutions;
- (d) determine the additional training places which need to be created so that, by 1967-68, the output on the basis of a two-year course should match the annual requirements; (estimates to be worked out separately for primary and middle schools);
- (e) assess the requirements of teachers for the special categories, e.g. women teachers, teachers for remote areas, teachers for tribal areas, etc.; and
- (f) work out the estimates of the cost and the phasing of the whole programme.

The Study Groups should start functioning immediately and complete their work by March, 1963. The plans prepared by the Study Groups should be combined for the overall plan of teacher education for the country.

(Para 79).

V. Location and Planning of Training Institutions

The location and planning of training institutions should be done with great care. The following general principles are suggested in this regard :

- (a) A district should be taken as the unit of planning and each district should be provided with as many training institutions as are required to meet the demand of elementary teachers within its area;
- (b) Since 80 per cent of the population is rural, about four-fifths of the training institutions should be located in rural areas;
- (c) As the training institutions need practising schools of a fair size, an ideal location for a training institution would be a township with a population between 5,000 and 15,000. This will provide the necessary facilities of a practising school on the desired scale without detracting from the rural character of the location; and
- (d) The institutions should be so located that they would be easily accessible from all parts of the district. There is a proposal that each training institution should provide extension services to primary and middle schools within its neighbourhood. The location of training institutions should, therefore, be so planned, that when these services are started, it should be possible to cover most of the primary and middle schools in the district. (Para 80)

VI. Cost of the Programme

Each State and Union Territory should prepare a blueprint of an elementary training institution of the optimum size and work out the details of its total cost—both capital and recurring. It should also prepare a detailed estimate of the capital and recurring costs involved in raising the existing training institutions to the desired level in size and efficiency as well as in the establishment of the new institutions required. (Para 81)

VII. General Education of Elementary School Teachers

The following policies should be adopted in respect of the general education of elementary school teachers :

- (a) As soon as practicable, and in any case not later than 1965-66, the recruitment of teachers for primary and middle schools should be only from those who have passed the Matriculation or equivalent examination.
- (b) Beyond the deadline fixed for the recruitment of matriculates only, the selection of a non-matriculate teacher should be permitted in the following exceptional cases :
 - (1) For tribal or remote areas, if suitable matriculate teachers are not available; and
 - (2) Women teachers in rural areas, if no matriculate women teachers are available.

- (c) Even in the exceptional cases mentioned in (b) above, suitable measures should be adopted to see that the need to recruit non-matriculate teachers disappears as quickly as possible and at a date which does not extend beyond 1971.
- (d) The employment of graduate teachers in elementary schools should be encouraged. It is desirable that the headmaster of every primary school with more than 250 children should be a graduate. (Paras 82—88)

VIII. Duration of the Training Course

The duration of the elementary course should be two years for all teachers who have completed secondary school, or the higher secondary or even the intermediate course. For those who have not completed the secondary school, the duration of the training course should be three years which should be divided into two periods—a continuous pre-service training programme of two years followed by an in-service training programme of one year. (Paras 89—92)

IX. Revision of Syllabi

The existing syllabi of training institutions for elementary teachers need considerable revision. This programme can be helped if a model syllabus can be evolved to serve as the general framework within which such adaptation as may be required to suit the conditions of different States may be made. This work should be undertaken by the National Institute of Education in collaboration with the representatives of the State Governments and selected Principals of training institutions. (Para 93)

X. Training of Teacher Educators

Special in-service training courses should be organised for teacher educators. It is desirable that universities should provide specialised courses at the M. Ed. level to prepare teacher educators for training institutions. It would also be a distinct advantage if persons taking such specialised courses become familiar with methods of infant teaching. (Para 94)

XI. Improving the Physical Conditions in Training Institutions

A blueprint of the minimum essential needs of a training institution for elementary teachers should be prepared and immediate steps should be taken, during the third Five Year Plan itself, to improve the physical conditions in training institutions such as buildings for classrooms, hostels, staff quarters, libraries, laboratories, land for the farm and teaching equipment. The Study Groups proposed to be set up in States and Union Territories should examine the existing position in this respect and prepare development programmes with estimates of cost. (Para 95)

XII. In-service Teacher Education

In-service teacher education is of the highest importance and a beginning should be made in the third Five Year Plan itself for developing a nation-wide network of in-service training programmes. The ultimate objective should be to give, to every elementary teacher,

in-service training of not less than two months' duration in every five years of service.

The in-service training programmes have to be institutionalised; and an adequate provision for this purpose should be made, either in existing institutions, or in special institutions created for the purpose.

In-service training programmes should also be organised for headmasters and members of inspecting staff. (Paras 96—99)

XIII. Extension Services

The scheme of the National Council of Educational Research and Training for establishment of extension service centres in training institutions for elementary teachers is welcome. The number of such centres should be increased to 240 at least by the end of the third Plan and 50 per cent of the training institutions should be covered by the end of the fourth Plan. (Para 100)

XIV. State Institutes of Elementary Education

State Institutes of Elementary Education should be established as early as possible and should be charged with the following functions :

- (i) to provide in-service training to teacher educators and the inspecting staff connected with elementary education;
- (ii) to undertake studies, investigation in all problems of education and research in methods of teaching and the curriculum in elementary schools;
- (iii) to prepare instructional material and teaching aids for the use and guidance of the teachers; and
- (iv) to carry out periodic evaluative studies of the programmes of training institutions, extension activities and the progress of elementary education in general and of basic education in particular. (Para 102)

XV. Incentives and Facilities for Further Self-Education

Adequate incentives and facilities for further education should be provided to elementary school teachers. For this purpose—

- (i) The conditions governing the grant of study leave should be liberalised;
- (ii) Advance increments or higher scales of pay should be given to teachers who acquire higher academic or professional qualifications;
- (iii) The possibilities inherent in the correspondence courses should be examined with a view to providing to elementary teachers opportunities for acquiring higher professional qualifications. A beginning in this direction can be made through the State Institutes of Elementary Education; and
- (iv) The teachers who acquire higher qualifications should be eligible for promotion to the inspecting cadre and to the training institutions. (Para 103)

XVI. Production of Educational Literature in Indian Languages

The non-availability of adequate educational literature in Indian languages is one of the main handicaps of the elementary teacher in India. Steps will, therefore, have to be taken to produce this literature in all the Indian languages. The primary responsibility for this programme should be on the National Council of Educational Research and Training and the State Institutes of Elementary Education. The organisations of teachers have a particularly important role to play in this sector and should be encouraged in all possible ways to assume a share of this responsibility. (Paras 104 & 105)

XVII. Comprehensive Organisation for Teacher Education

The programme for the reform of teacher education cannot be implemented effectively through *ad hoc* measures : it must be supported by an adequate organisation. We are firmly of the conviction that a time has come to create a permanent organisation at all levels which would be charged with the responsibility for improving teacher education and which should be giving continuous thought to its problems. (Paras 106--108)

XVIII. State Councils of Teacher Education

In every State, there should be a State Council of Teacher Education, consisting of the Director of Education, representatives of the University Departments of Education, representatives of Principals of training colleges for secondary teachers, representatives of the Principals and teachers of training institutions for pre-primary and elementary teachers, and non-official educationists. The Council will deal with teacher education at all levels, pre-primary to secondary, and have the following functions :

- (i) To prepare programmes for the development of teacher education and supervise their implementation;
- (ii) To set standards for teacher education;
- (iii) To confer recognition on institutions which fulfil the requirements prescribed by the Council;
- (iv) To prepare the curriculum and syllabuses according to which the training programmes, both pre-service and in-service, should be carried out;
- (v) To conduct examinations and award Certificates and Diplomas;
- (vi) To arrange for the inspection and supervision of the training institutions recognised by it;
- (vii) To coordinate the training programmes and collaborate with other agencies in the State and outside in the furtherance of its objectives. (Paras 109 & 110)

XIX. Special Officer for Training Institutions

Every State should have a Special Officer (or any other suitable administrative machinery) whose whole-time responsibility would be for the programmes of training institutions and that the annual inspection of the training institutions should be carried out by panels of experts. (Paras 111 & 112)

XX. Department of Teacher Education in the NIE

The decision to establish a Department of Teacher Education in the National Institute of Education is welcome. The Department should have the following functions :

- (i) To act as a clearing house of ideas and information;
- (ii) To provide advanced level training courses in teacher education;
- (iii) To conduct research in various aspects of teacher education;
- (iv) To prepare instructional literature in Hindi and other regional languages for the use of training institutions; and
- (v) To provide consultative services to the States.

(Paras 113 and 114)

XXI. Financial Implications

The total cost of a programme of teacher education, both pre-service and in-service, would be of the order of Rs. 112 crores spread over a period of 10 years. This would be about 5 per cent of the total direct expenditure on elementary education.

A beginning should be made for implementing this programme by providing a sum of Rs. 20 crores in the third Five Year Plan. A sum of about Rs. 60 crores would be needed in the fourth Five Year Plan for this programme.

(Paras 115—117)



ANNEXURE I

ESTIMATES OF REQUIREMENTS OF ADDITIONAL TEACHERS

The total number of teachers in the primary and middle schools is estimated at 12,40,000 at the end of the second Plan. Of these, about 65 per cent would be trained so that the backlog of untrained teachers at the end of the second Plan would be about 4,34,000. At the end of the third Plan, the total number of teachers in primary and middle schools is estimated at 16,26,000 out of which 75 per cent would be trained. The backlog of untrained teachers at the end of the third Plan would, therefore, be about 4,06,500. It will thus be seen that, in spite of all the expansion of training facilities attempted in the last two years of the second Plan and in the third Plan itself, there is no appreciable reduction in the backlog of untrained teachers and the problem remains as difficult and large as at the end of the second Plan. If this backlog is to be cleared in a short period, say five years, we would have to train about 80,000 teachers a year which is almost equal to the total annual output of trained teachers at present. In other words, all the existing training places would be just sufficient for clearing the backlog of untrained teachers for a period of five years. During this period, however, we would have recruited, another 4,00,000 untrained teachers to meet the needs of expansion. The problem of the backlog of untrained teachers in service would remain exactly where it was at the beginning of the programme. It is, therefore, clear that the problem is not likely to be resolved unless an unusual effort is made to deal with it.

Annual Requirements of Additional Teachers (1966—76)

Additional teachers are required for :

- (a) normal replacement needs arising out of such causes as retirement, death or resignation; and
 - (b) meeting the requirements of new schools or increased enrolment in elementary schools. In estimating the annual requirements of additional teachers between 1966 and 1976, both these factors have to be taken into consideration.
- (a) **Number of Teachers Required to Fill the Gaps in the Existing Cadre**

What is the number of teachers required for normal replacement needs? No precise figures are available. The third Five Year Plan of Madras State (which is the only plan which has attempted to make a forecast of the requirement of elementary school teachers) has assumed an annual replacement rate of 4 per cent. The Karachi Plan has assumed the annual replacement rate of 5 per cent. In several European countries, the replacement rate is about 7 per cent. In Japan it is very low, less than 2 per cent. The estimates of the annual replacement rate depend on a very large number of factors such as (i) average expectation of life; (ii) the average duration of the total service of elementary school teachers; (iii) the rate of turn over in the profession; (iv) the sex composition of the teaching profession and (v) the pace and size of the recruitment to the profession in the

preceeding years. It is therefore, obvious that the data regarding replacement rate must necessarily differ from country to country. It would be useful if the State Governments undertook appropriate studies in this regard.

An attempt was made, in the Ministry of Education, to obtain some data on the problem by making field investigations in a few selected districts. The details of this study are given in Annexure II. It will be seen therefrom that the approximate replacement rate during the next 15 years is likely to be of the order of 3.7 per cent per annum. For purposes of this Plan, therefore, replacement rate has been assumed at the rounded off figure of 4.0 per cent per annum.

(b) Total Number of Teachers Required for Additional Enrolment

Once the full target of universal education is reached, the requirement of additional teachers will be limited to the provision for increase in population (say, about 2.0 per cent per year), for normal replacement (say, about 3 to 4 per cent per year) and for improving the pupil-teacher ratio. But for the next 15 years the major proportion of the requirements of additional teachers will be for expanding educational facilities.

The estimates of requirements and their phasing would therefore be determined by (i) the targets to be reached, and (ii) the pupil-teacher ratio assumed.

With regard to targets, three assumptions are possible :

Assumption I. It may be assumed that, by 1975, the enrolment in the age-group 6—11 would be 100 per cent and that in the age-group 11—14 would be 50 per cent. This will imply that the total enrolment in the age-group 6—14 would rise from 59.4 million in 1965-66 to 100 million in 1975-76.

Assumption II. It may be assumed that, by 1975, the enrolment in the age-group 6—11 would be 100 per cent and that in the age-group 11—14 would be 75 per cent. This will imply that the total enrolment in the age-group 6—14 will increase from 59.4 million in 1965-66 to 110 million in 1975-76.

Assumption III. It may be assumed that, by 1975, the enrolment in the age-group 6—11 would be 100 per cent and that in the age-group 11—14 would be 100 per cent. This will imply that the total enrolment in the age-group 6—14 will increase from 59.4 million in 1955-66 to 120 million in 1975-76.

With regard to pupil-teacher ratios, four different assumptions are possible : 35, 40, 45 and 50. While for global estimates, these ratios provide good working bases, they would have to be modified a little when detailed estimates are cast for a district making an allowance for the fact that the pupil-teacher ratio for the first five classes is necessarily different from that for the three classes of junior high school. On the bases of all these different assumptions, the additional requirements of teachers can be calculated as shown in the following table :—

TABLE NO. I
Number of Additional Teachers Required to Meet the Demand of Additional Enrolment (1966—76)

		(in thousands)									
Assumption about enrolment by 1975-76	Total enrolment in classes I—VIII in 1966	No. of teachers expected to be in position in 1966	No. of teachers expected to be in position in 1976 on the assumption of pupil-teacher ratios of				Teachers needed for additional enrolment on the basis of the pupil-teacher ratios of				
			35	40	45	50	35	40	45	50	
I. 100 p.c. in 6-11 age-group and 50 p.c. in 11-14 age-group	59,400	100,000	1,626	2,860	2,500	2,222	2,000	1,234	874	596	374
II. 100 p.c. in 6-11 age-group and 75 p.c. in 11-14 age-group	59,400	110,000	1,626	3,146	2,750	2,444	2,200	1,520	1,124	818	574
III. 100 p.c. in 6-11 age-group and 100 p.c. in 11-14 age-group	59,400	120,000	1,626	3,432	3,000	2,666	2,400	1,806	1,374	1,040	77

It is obvious that the total number of teachers needed will be 1,06,000 a year at the minimum (the lowest target and the highest pupil-teacher ratio) and 2,64,000 a year at the maximum (the highest target and the lowest pupil-teacher ratio).

(c) Total Number of Additional Teachers Required

From the data given in the preceding two sub-paragraphs, the total requirements of additional elementary school teachers during 1966—76 can be estimated as shown below :

- (i) The number of teachers required for replacement in the initial cadre of 16,26,000 which would be in position in 1965-66 may be taken at 4 per cent per year as shown in Annexure I. This is equal to a demand of 6,50,000 additional teachers for the period as a whole or of 65,000 teachers per annum.
- (ii) The number of teachers required to meet the demand of additional enrolment has already been indicated in Table No. I. To this demand, we will have to add 2 per cent per year (on the number of teachers that would be actually employed in that year) on account of vacancies created by deaths and resignations. This works out at a total of 10 per cent on the total number of teachers required during the period of ten years.
- (iii) The total number of teachers required during the period 1966—76 would thus be equal to the sum of : the number of teachers required for replacement in the initial cadre of 16,26,000 at 4 per cent per year; the number of teachers required for additional enrolment as shown in Table No. I; and the number of teachers required for the replacement in the ranks of the new teachers recruited during the period (on account of deaths, resignations, dismissals, etc.) at 2 per cent per annum.

These calculations have been shown in the following table :—

TABLE No. II
Total Number of Additional Teachers Required (1966—76)

Assumption about enrolment by 1975-76	Teachers required for replacement @ 4% per year of the initial cadre of 1,626,000 in 1965-66 in the 10-year period	Teachers required for additional enrolment on the basis of different pupil-teacher ratios of					Total number of additional teachers required (1966—76) on the basis of pupil-teacher ratios of					Annual requirements of additional teachers in 1966—76 on the basis of pupil-teacher ratios of				
		35	40	45	50		35	40	45	50		35	40	45	50	
I. 100 per cent in the age-group 6-11 and 50 per cent in 11-14 age-group	6-50	1,234 123*	874 87*	596 60*	374 37*		2,007	1,611	1,306	1,061		201	161	131	106	
II. 100 per cent in 6-11 age-group and 75 per cent in 11-14 age-group	6-50	1,520 152*	1,124 112*	818 82*	574 57*		2,322	1,886	1,550	1,281		232	189	155	128	
III. 100 per cent in 6-11 age-group and 100 per cent in 11-14 age-group	6-50	1,806 181*	1,374 137*	1,040 104*	774 77*		2,637	2,161	1,794	1,501		264	216	179	150	

*Replacements added at 10 per cent on the total number of teachers required (replacement rate being taken at 2 p.c. per annum on the teachers actually employed during the year).

ANNEXURE II

REPLACEMENT RATIO FOR ELEMENTARY TEACHERS

1. *Object of the Paper.* In order to find out the probable replacement ratio for elementary teachers, the State Government and Union Territories were requested to collect information on (1) teachers who are in the age-group of 41 and above and who are thus expected to retire in the next 15 years, and (2) the average annual number of teachers who leave the profession owing to such cases as deaths and desertions. The information was to be collected for one or more districts selected at random in each State or Union Territory.

2. *Data Collected* The information was received from the States of Andhra Pradesh (2 districts), Assam (1 district), Bihar (2 districts), Gujarat (3 districts), Punjab (1 district), Madhya Pradesh (2 districts) and Uttar Pradesh (2 districts). Among the Union Territories, information was received from the Delhi Municipal Corporation, Manipur, NEFA, L.M. & A. Islands and Tripura.

3. *Annual Retirement Ratio* The following table gives the consolidated data regarding the number of teachers who are in the age-group of 41 and above.

TABLE NO. I.—*Annual Retirement Ratio Among Primary Teachers*

State/ Union Territory	Name of district	Year for which data is given	Total No. of tea- chers in the district	Total No. of tea- chers above 40 years of age	Annual Retire- ment Ratio (per cent)
Andhra Pradesh	Krishna East	1960-61	2,644	1,137	1.7
	Warrangal	1960-61	3,090	325	1.5
Assam	Kamrup	1960-61	4,701	1,030	1.5
Bihar	Palamau	1960-61	2,382	528	
	Muzaffarpur	1960-61	6,191	2,664	2.5
Madhya Pradesh	West Nimar	1960-61	1,741	205	
	Bilaspur	1960-61	3,148	627	1.1
Punjab	Rohtak	1960-61	1,545	391	1.7
Uttar Pradesh	Saharanpur	1960-61	2,474	486	
	Allahabad	1960-61	2,346	956	2.0
Delhi Adm.	Delhi	1960-61	2,216	617	
M.C.D.	Delhi	1960-61	533	103	1.7
L.M. & A.	L.M. & A.	1960-61	111	11	0.7
N.E.F.A.	Subansiri Fr.	1960-61	29	—	
	Divn. Tirap Fr. Div.	1960-61	76	3	0.2
Manipur	Manipur	1960-61	375	59	1.1
Tripura	Dharmanager	1960-61	341	45	0.9
INDIA			44,280	12,724	1.9

The annual retirement ratio given in the last column of the above table is calculated as follows :

- (a) The total number of teachers above 40 years of age is divided by 15 in the first instance to determine the average number of teachers who are likely to retire during the next 15 years.

- (b) The average annual number of teachers who retire every year is then divided by the total number of teachers in service in the starting year to obtain the annual retirement ratio.

Annual Desertion Ratio

4. The average annual number of teachers who leave the profession on account of causes other than retirement is given in the following table.

TABLE NO. II.—*Annual Desertion Ratio Among the Teachers*

State/ Union Territory	Name of District	Years to which data relates	Total No. of Teachers	Total No. of deaths, desertions, dismissals etc.	Annual Replace- ment Ratio
Andhra Pradesh	Krishna East	1958-59	2,652	60	1.3
		1959-60	2,617	54	
		1960-61	2,644	18	
Assam	Kamrup	1958-59	3,894	18	0.6
		1959-60	4,344	23	
		1960-61	4,471	40	
Bihar	Palamau	1958-59	5,570	36	1.2
		1959-60	5,940	49	
		1960-61	6,191	43	
Gujarat	Surat	1958-59	5,653	177	3.6
		1959-60	6,162	169	
		1960-61	6,476	211	
	Navsari	1958-59	—	—	
		1959-60	177	6	
		1960-61	184	36	
	Bhavnagar	1958-59	3,192	136	
		1959-60	3,007	162	
		1960-61	3,210	160	
Madhya Pradesh	West Nimar	1958-59	1,546	9	3.6
		1959-60	1,571	27	
		1960-61	1,741	58	
	Bilaspur	1958-59	—	—	
		1959-60	2,465	134	
		1960-61	2,823	147	
Punjab	Rohtak	1958-59	1,280	31	2.1
		1959-60	1,383	39	
		1960-61	1,401	49	
Uttar Pradesh	Saharanpur	1958-59	2,227	55	2.1
		1959-60	2,274	74	
		1960-61	2,409	115	
	Allahabad	1958-59	1,943	9	
		1959-60	1,961	11	
		1960-61	2,096	19	
Delhi Adm.	Delhi	1958-59	5,244	8	0.4
		1959-60	5,988	14	
		1960-61	7,141	40	
M.C.D.	Delhi	1958-59	362	2	0.4
		1959-60	429	6	
		1960-61	500	9	
L.M. & A. Islands	L.M. & A. Islands	1958-59	76	1	2.2
		1959-60	84	4	
		1960-61	104	1	

TABLE NO. II—*Annual Desertion Ratio Among the Teachers*—contd.

State/ Union Territory	Name of District	Years to which data relates	Total No. of Teachers	Total No. of deaths, desertions, dismissals etc.	Annual Replac- ment Ratio
Manipur	Manipur	1958-59	2,738	4	
		1959-60	2,807	2	
		1960-61	3,449	2	
N.E.F.A.	Subansiri Fr. Div.	1958-59	25	—	1.4
		1959-60	29	—	
		1960-61	29	—	
Tripura	Dharamnagar	1958-59	244	3	
		1959-60	265	6	
		1960-61	294	3	
TOTAL			135,424	2,503	1.8

Conclusions

5. It will be seen that the annual retirement ratio shows large variations from area to area. For example, it is the least in NEFA (0.2 per cent) and the highest in the districts of Bihar and Gujarat. The reason also is obvious. In the older districts of Bihar and Gujarat, primary education has been expanding for a very long time so that a fairly large number of older teachers are actually in service. In NEFA, the entire development of education is new and there are hardly any teachers in the older age-limit. Such variations are unavoidable but they can be easily understood.

(2) In the case of the annual desertion ratio also, the variations from one area to another are very large. The least ratio is seen in Manipur where it is almost nil and highest in Gujarat and Madhya Pradesh. Here also, factors such as availability of alternative employment, remuneration offered to primary teachers, or average death-rate are responsible and these vary from one part of the country to another. The variation in the desertion ratio also is, therefore, inevitable.

(3) Putting these two figures together, it appears that the overall replacement ratio for primary teachers (all causes) would be 3.7 or 4 per cent in round figures.

ANNEXURE III

SUBJECT.—Scheme of the Government of Maharashtra for the Training of Primary School Teachers.

There are about 41,000 untrained primary school teachers in the service of government and local bodies in the States. The question of liquidating this untrained element by offering more liberal terms of financial assistance during the period of training was under the consideration of the government for some time. Government has considered this question carefully and is pleased to sanction the following measures to clear the backlog of untrained teachers and to ensure recruitment of only trained candidates after June 1965.

Duration of the Training Course

1. (a) Primary school teachers who have put in more than 15 years service or who have completed 35 years of age on 1-4-1962 should be considered as experienced and need not be sent for training. These experienced teachers should be given the first increment of Rs. 2½ p.m. with effect from 1-4-62 and subsequent annual increment of Rs. 1½ p.m. till they reach the minimum of Junior Trained teachers' scale (i.e. Rs. 50). Thereafter they should be allowed to draw increments in the Junior Trained Teachers' scale. If any of these teachers desire to be trained, they should be allowed to undergo one year's training course prescribed for teachers who have put in more than 7/8 years service but less than 15 years. This concession should be given for the current year only.

(b) Primary school teachers who have put in between 7 to 8 years service but less than 15 years service on 1-4-62, should be given one year's training and should be treated as Junior Trained Teachers on their passing the Junior Primary Teachers' Certificate Examination. This course should be for the current year only.

(c) All other teachers except those who have passed the S.S.C. Examination should be given a regular training of 2 years. The teachers with S.S.C. should be allowed to get one year's training for being qualified for the Junior Trained Teachers' scale as at present.

Recruitment of Trained Candidates for the Posts of Teachers

2. The recruitment of untrained candidates for the posts of primary school teachers should be stopped from June 1965 onwards except in the case of posts reserved for backward classes. In the case of these posts, untrained candidates should be recruited only if no trained candidates are available from them and to the extent of the reservation.

Training Programme

3. The following training programme proposed by the Director of Education to clear the backlog should be approved.

TEACHERS IN SERVICE

Year	No. of teachers under training	New Admissions			Total No. of teachers trained at the end of the year
		One year's short-term course	One year's course for S.S.C.	Two year's course for P.S.S.	
1962-63	9,000	8,000	1,000	2,000	18,000
1963-64	2,000	—	7,500	6,000	9,500
1964-65	6,000	—	2,500	4,000	8,500
1965-66	4,000	—	3,000	6,000	7,000
1966-67	6,000	—	—	7,000	6,000
					49,000

PRIVATE

1962-63	—	—	—	—	—
1963-64	1,000	—	3,500	1,000	3,500
1964-65	1,000	—	3,000	1,000	4,000
1965-66	1,000	—	3,000	1,000	4,000
1966-67	1,000	—	3,000	1,000	4,000
					15,500

In order to complete this programme, reservations made in favour of Local Bodies' teachers in Government and non-Government Primary Training Colleges should be relaxed to the extent necessary so that the management of the colleges should be in a position to admit private candidates to the extent indicated in the programme.

The Director of Education should also be authorised to increase the strength of each Division in the Basic Training institution by 10 in order to increase the total intake capacity of the institutions from 18,000 to 20,000 from this year.

Financial Assistance to Teacher Trainees

4. While under training teacher trainees should be given financial assistance as indicated below :

(a) Stipend at a uniform rate of Rs. 35 p.m.

(b) Loan scholarship of Rs. 25 p.m.

The loan should be repayable in 10 years at a monthly instalment of Rs. 5 after training. If the teacher dies before repayment such portion of the loan as has remained unpaid at the time of the death should not be recovered from his family members or from the amounts payable to them by the Department. The loan should be advanced on usual conditions such as rate of interest, execution of a bond to serve the Board for a definite period, etc. which have been laid down in respect of loans advanced to teacher trainees in Western Maharashtra in the past.

The practice of paying basic pay of Rs. 40 p.m. to primary teachers deputed for training in Marathwada, should be discontinued with

effect from the date of issue of these orders and the teacher trainees should be given financial assistance admissible under these orders.

5. No stipend will be admissible for candidates admitted as fresh candidates by the colleges direct or through elimination test. The above monetary assistance will be available to teacher candidates only.

6. The Director of Education, Poona, should be requested to see that the proposals sanctioned under these orders are implemented and the training programme is conducted according to the schedule.



ANNEXURE IV

SUBJECT.—A Scheme of the National Council of Educational Research and Training for Provision of Extension Services in Training Institutions for Elementary Teachers.

1. During the third Plan, emphasis has been laid on providing free, compulsory and universal education for the age-group 6 to 11 and to develop a programme of basic education in the context of this decision. It is also desired to bring about an all-sided educational development for the age-group 6 to 14, and to make an intensive effort by studying the problems involved in a scientific manner so that the necessary training and experience available in such intensive studies may prove useful in the fourth and later Plans for the development of elementary education. With this aim in view, it has been decided to develop a programme of extension services in training institutions for primary teachers. The work of organising the programme has been entrusted to the National Institute of Basic Education.

2. A similar programme is already in implementation at the secondary level where 54 Extension Services Centres have been established in selected post-graduate teacher training institutions with assistance from the Ford Foundation and T.C.M., and have been functioning for varying periods in the second Plan. Each Centre serves about 50 to 100 secondary schools in its neighbourhood and carries out a comprehensive programme of in-service training through seminars, conferences and workshops, audio-visual, library and advisory services and publications. The experience of the past five years has shown that these Centres constitute a most dynamic agency for carrying new educational ideas and practices to the secondary schools and also for stimulating the pre-service training programme in the colleges by bringing it closer to the actual needs of the secondary schools. The project has, in fact, been so successful that it is proposed to extend it to more training colleges in the third Plan.

Organising Extension Services

3. (i) The project may be described as the Extension Services Project for the primary teacher training institutions with the main object to help the staff of the training institutions to initiate, plan and organise work for the in-service training of teachers in the areas in which they are located.

(ii) As has been indicated above, the major function of this programme is to work with the staff of the training institutions in the initiation, planning and development of field activities. These might be generally classified as follows :

- (a) To encourage primary schools in the surrounding areas to improve themselves (viz., the effectiveness of teachers, school-community relations, details of the syllabus and

their implementation, etc.) through the provision of consultative resources and grants provided. This major purpose makes it clear that the general orientation of the project should emphasise the experimental and consultative approach rather than the dogmatic and directive approach. The statement of this purpose also makes it clear that most of the actual consultative services are to be provided by the staff of the training institutions. The major responsibility of the coordinator is to *coordinate* and provide the necessary guidance and grants.

- (b) To facilitate the vitalisation of the teacher training curriculum by means of closer association with schools. One of the serious criticisms made of teacher training institutions is the isolation of the institution from the real situations in which the schools function and in which the trainees will be called upon to work. One of the indirect but nevertheless important functions of the offices being established would be to facilitate the more intimate association of members of the training school staff with the purposes and activities of primary schools.
- (c) To coordinate field studies and research designed to determine, analyse the reasons for, and improve the quality of the primary school programmes.

These field studies might be of two general types. Group one would be the continuous kind of study that is necessary in order to provide consultative services. Second type might represent studies that are initiated by NIBE but require the close collaboration of field agents for the accumulation of data. Problems of study may well refer to wastage and stagnation, incentives for free and compulsory education, improvement on basic education lines, etc.

(iii) *Implementation of Purposes*

These three major purposes of improvement of schools, improvement of teacher training programmes, encouragement and co-ordination of field studies and research—will direct the activity of these ESPs. Their main work will consist of helping teachers to develop a programme of improvement in their schools. For this purpose, the Extension Services will take up a group of schools as a unit and for each unit the concerned training institutions will prepare a developmental programme for a specified period of time. This developmental programme will be carried out in various ways, some of which are suggested below :

- (1) *In-Service Training*: Through seminars and refresher courses for Headmasters and teachers of the primary schools and for community leaders. This will pertain to school subjects, teaching methods, general information, production of simple aids and equipment, craft work and school-community relations.
- (2) *Dissemination and Discussions*: Through publication of guide-books etc., lectures and consultation by experts, demonstrations, workshops and conferences, exhibitions, etc.

- (3) *Visits and Consultations*: By members of the staff of the training institutions and ESP' inter-school visits by teachers, and similar activities.

These activities are only suggestive.

(iv) *Staff of ESPs*

It is desired that the personnel in each such project should include one full-time person as coordinator and a full-time clerk-cum-typist. It is essential that the trainees in the teacher-training institutions as well as staff-members will be involved in the ESPs.

(v) *Qualifications of the Coordinator*

The Coordinator should be a trained graduate with experience of not less than five years in teaching in primary teacher training institutions and/or inspecting primary schools. He should also have good experience in basic education and an ability to demonstrate effectively the basic education techniques and programmes.

The professional qualifications of the Coordinator are implied by the functions which the project is expected to achieve. First, he must be a person whose influence is accepted and recognised by the members of the training college staff. Secondly, he must have dynamic personality and the capacity for good organisation. Thirdly, he should be able to build up good human relations that would make it possible for him to communicate clearly and directly with teachers in basic schools. Fourth, he should be disposed to the experimental or research-oriented point of view and should conceive of his work as consultative and guidance-oriented rather than dogmatic and inspectorial. Finally, this person should himself be susceptible to growth and training on the job.

Evaluation of ESPs

4. The evaluation of the various projects would be continuous and designed to determine the degree to which each Extension Service Project fulfils its function. One of the first responsibilities of the Coordinator would be to procure some "bench mark" data in regard to the general quality of primary and basic schools in the area, the extent to which the training staff members are involved in field activities, the general quality of the training school programme, and the extent to which the training school is viewed by the primary schools in the area as influencing their practices for the better. He also helps in preparing a plan for the development of each school. Each such ESP will have an advisory committee consisting of representatives of basic and primary schools, training institutions, other educational institutions and community leaders and development department of the area.

Accommodation and Equipment

5. It is recommended that the ESP being established should include two rooms. One, approximately thirty feet by thirty feet, would serve as a place for the meeting of seminars, workshops, etc. as well as for the meetings of staff members and teachers from the surrounding districts who are reading educational materials. The other room should be one small office for the Coordinator and typist-cum-clerk.

So far as equipment is concerned, there should be necessary almirahs, filing cabinets, and cyclostyling equipment.

The conventional furniture including desks and chairs would be required for the staff of ESP. In addition, there should be ample blackboard space and working tables in the larger room. There should also be a minimum supply of professional reading materials as well as a basic library of professional books. These materials might either be loaned out to the teachers in the basic and primary schools or used by them when they come to the training institutions for in-service programme.

Training of ESP Personnel

6. Attention has been given above to the characteristics of the Coordinator that would give maximum assurance of successful operation of the project. In addition to the advantages that would obtain from careful selection, arrangements would be necessary for the initial and continuous in-service training of principals, coordinators and training staff members at the National Institute of Basic Education. Subsequently there will be training camps for each of the training institution to include the teaching staff, trainees and staff members of the schools concerned in the region.

Relationship of ESP to NIBE

7. The relationship of the Extension Services Project to the NIBE will be somewhat similar to the relationship that exists at present between the Extension Services Centres and the DEPSE, of course suitably modified and adapted to the special requirements of the primary school teacher whom it is expected to serve. The Directorate at present maintains an advisory and supervisory control over the Extension Centres, guides them in organising their programmes from year to year, coordinates their activities with the needs of the secondary schools as well as with the larger programmes in secondary education initiated by the Directorate and carries out periodic assessments of the work of the Centres. Similarly, the NIBE will have to shoulder responsibility for the initiation, development and coordination of the functions of the Extension Departments. It will also have to provide periodic training to the personnel of these projects and also prepare "packaged" material which may be used at conferences, demonstrations, workshops, etc. These materials would, it is expected, provide the coordinators with necessary instruments for implementing in-service programmes.

Transport of ESPs

8. Each ESP should be provided with two cycles to help the staff for speedy and effective communication with the schools of the area.

Programme of Development

9. It is proposed to adopt the following programme for the development of this project :

- (1) During the year 1961-62, preparatory work will be done for starting 30 Extension Service Centres in 1962-63.
- (2) During the year 1962-63, 30 centres are proposed to be started. The Coordinators for these centres will be trained

at New Delhi and in addition two seminars will be held for the development of this programme.

- (3) In 1963-64, preparations will be made for opening 15 Centres in 1964-65.
- (4) In 1964-65, 15 additional Centres will be opened. Two seminars would be conducted as usual and the new coordinators will be trained and a seminar for their principals will be organised. Two usual seminars for other personnel would be organised.
- (5) In 1965-66, the 15 new Centres will be opened and their coordinators would be trained and a seminar for their principals will be organised. Two usual seminars for other personnel would be conducted.

It will thus be seen that the number of Centres would be nil in 1961-62, 30 in 1962-63, 30 in 1963-64, 45 in 1964-65 and 60 in 1965-66.

Budgetary Estimates

I. Extension Centres

10. The estimated cost for each ESP is worked out below :

RECURRING

- (a) *Staff* : The salary of the Coordinator will vary from institution to institution. The principle should be to select a person working on the staff of the institution and to give him an additional 20% of his pay as allowance for doing this work.

	Rs.
(i) Salary of Coordinator @Rs. 300 p.m. (including allowances) ..	3,600
(ii) One Clerk-cum-Typist @Rs. 100 p.m.	1,200
TOTAL (a) ..	4,800

- (b) *Grant-in-aid*
50 schools. Rs. 100 per year per school 5,000

(c) <i>T.A. and Honorarium</i>	
T.A. to Coordinator	250
T.A. and Honorarium to resource personnel and advisory committee members	500
TOTAL (c) ..	750

- (d) Organisation of in-service programmes, seminars, workshops, etc., @ Rs. 2 per day for 200 teachers on an average of 10 days in a year 4,000

- (e) Exhibition and Audio-Visual Services 500

- (f) *Contingencies*

Including stationery and printing; postage; casual labour; repairs to furniture and equipment, hiring of transport, incidentals etc., etc. .. 2,000

TOTAL RECURRING ..	17,050
or ..	17,000

NON-RECURRING

(1) Two Cycles	400
(2) Duplicator	2,500
(3) Furniture, almirahs, tables, chairs, etc.	1,000
(4) Library books	2,000
(5) Maps, globes, audio-visual material including projector	3,000

TOTAL NON-RECURRING ..	8,900
------------------------	-------

TOTAL EXPENDITURE FOR THE PLAN PERIOD

(a) Non-recurring expenditure for 60 institutions@Rs. 8,900 each .. Rs. 5,34,000

Year	No. of institutions to be opened	Rs.
1961-62	—	—
1962-63	30	2,67,000
1963-64	—	—
1964-65	15	1,33,500
1965-66	15	1,33,500

(b) Recurring expenditure @ Rs. 17,000 per institution Rs. 28,05,000

Year	Institutions	Rs.
1961-62	—	—
1962-63	30	5.10 lakhs
1963-64	30	5.10 "
1964-65	45	7.65 "
1965-66	60	10.20 "

TOTAL Rs. 33,39,000

II. Central Unit at N.I.B.E.

(i) *Staff*.—For organising the training programme and coordinating the extension activities, the following staff will be needed in the National Institute of Basic Education. Since this is a totally new activity, there is no staff for this purpose in the National Institute.

1. One Field Adviser (Extension) to be appointed in 1962-63 (scale of pay : Rs. 820—1150).
2. Two Field Assistants to be appointed in 1963-64 (scale of pay : Rs. 325—575).
3. One Steno-Typist and one L.D.C. in the usual scale to be appointed in 1962-63.

(ii) *T.A. for N.I.B.E. Staff*.—Lumpsum provision for this should be Rs. 3,000 in 1962-63; Rs. 5,000 in 1963-64; Rs. 5,000 in 1964-65; and Rs. 7,000 in 1965-66.

(iii) *Training Programmes*

	Rs.
1962-63	
Training of 30 Co-ordinators (@ Rs. 500 per person) and one seminar for Principals @ Rs. 10,000 for seminar	25,000
Two Seminars @ Rs. 10,000	20,000
1963-64	
Training of 15 Co-ordinators and Principals	
Two Seminars	30,000
1964-65	
Training of 15 Co-ordinators and Principals	
Two Seminars	30,000
1965-66	
Two Seminars	20,000

(iv) *Contingencies*

1962-63	
Non-recurring	10,000
Recurring	10,000

1963-64	Rs.
Recurring only	10,000
1964-65	
Recurring and Non-recurring	12,500
1965-66	
Recurring and Non-recurring	15,000

11. The total requirements on this account would, therefore, come as follows:

Year	Staff	T.A.	Training Programmes	Contingencies	Total
1961-62	—	—	—	—	—
1962-63	7,118	3,000	45,000	20,000	75,118
1963-64	16,642	5,000	30,000	10,000	61,642
1964-65	21,455	5,000	30,000	12,500	68,955
1965-66	21,305	7,000	20,000	15,000	63,305
	66,520	20,000	1,25,000	57,500	2,69,020
			or say	Rs. 2,69,000	

12. The total estimated cost of the programme, as a whole would be Rs. 36.08 lakhs (Rs. 2.69 lakhs for the Central Supervisory and Administrative Unit and Rs. 33.39 lakhs for the Extension Centres).



TABLE I
Statistics of Training Schools in India (1882-1960)

Year and type of institution		Expenditure on training of teachers by sources								
		No. of training schools (2)	Enrolment (3)	Government funds (4)	Local funds (5)	Fees (6)	Others (7)	Total (8)	Average cost per trainee (9)	
(1)				Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1881-82	Men ..	91	3,371	—	—	—	—	3,28,636	97.4	
	Women ..	15	515	—	—	—	—	71,691	139.0	
	TOTAL	106	3,886	—	—	—	—	4,00,327	103.0	
1886-87	Men ..	113	4,451	2,49,751	1,33,001	—	58,850	4,41,602	99	
	Women ..	28	672	63,227	7,029	—	36,979	1,07,235	159	
	TOTAL	141	5,123	3,12,978	1,40,030	—	95,829	5,48,837	107	
1891-92	Men ..	116(a)	5,413	3,51,850	1,41,215	—	52,081	5,45,146	124	
	Women ..	37	793	67,454	11,886	—	50,896	1,30,236	164	
	TOTAL	153	5,206	4,19,304	1,53,101	—	1,02,977	6,75,382	130	
1896-97	Men ..	141	4,607	4,49,143	1,03,194	—	62,515	6,14,852	133	
	Women ..	45	1,118	82,087	12,748	—	74,140	1,68,975	151	
	TOTAL	186	5,725	5,31,230	1,15,942	—	1,36,655	7,83,827	137	
1901-02	Men ..	104	4,153	3,77,407	1,04,145	589	50,614	5,32,755	128	
	Women ..	51	1,252	94,404	10,781	8,665	65,549	1,79,399	143	
	TOTAL	155	5,405	4,71,811	1,14,926	9,254	1,16,163	7,12,154	132	

TABLE I—(contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1936-37								
Men ..	346	19,975(f)	27,59,927	77,134	31,947	1,38,626	30,07,634	156
Women ..	217	7,379	12,87,337	16,694	53,803	2,95,990	16,53,824	224
TOTAL	563	27,354	40,47,264	93,828	85,740	4,34,616	46,61,458	170
1941-42								
Men ..	373	22,856(g)	28,19,613	57,941	97,023	1,70,265	32,34,842	142
Women ..	239	9,265(h)	14,28,101	18,799	1,22,094	3,05,495	18,74,469	202
TOTAL	612	32,121	42,47,714	76,740	2,19,117	4,75,750	51,09,311	159
1946-47								
Men ..	443	27,938(i)	57,79,887	1,32,452	1,36,814	2,44,630	62,93,783	225
Women ..	206	10,835(j)	22,25,466	31,831	1,29,076	4,20,894	28,07,267	259
TOTAL	649	38,773	80,05,353	1,64,283	2,65,890	6,65,524	91,01,050	235
1950-51								
Men ..	567	54,028	1,00,73,688	2,18,858	4,73,010	7,03,303	1,14,68,859	212
Women ..	215	15,388	27,99,229	48,414	2,40,569	6,72,359	37,60,571	244
TOTAL	782	69,416	1,28,72,917	2,67,272	7,13,579	13,75,662	1,52,29,430	219
1955-56								
Men ..	678	63,873	1,37,03,720	62,485	7,86,902	9,52,619	1,55,05,826	243
Women ..	252	19,594	30,22,434	35,499	4,34,437	7,58,811	42,51,181	217
TOTAL	930	83,467	1,67,26,154	97,984	12,21,339	17,11,531	1,97,57,007	236
1959-60								
Men ..	800	73,296	2,06,75,372	73,064	9,96,658	9,58,665	2,27,03,759	310
Women ..	223	25,398	37,81,958	20,307	3,86,423	3,80,104	45,68,792	180
TOTAL	1,023	98,693	2,44,57,330	93,371	13,83,081	13,38,769	2,72,72,551	276
				(f) Including 245 women scholars	(g) Including 150 women scholars	(h) Including 78 women scholars		
				(i) including 291 women scholars	(i) Including 15 women scholars			

TABLE II
Teachers in Primary Schools

Year	No. of primary schools	Total enrolment in primary schools	No. of teachers in primary schools	
			Men	Women
1881-82	82,916	20,61,541	—	—
1886-87	89,187	25,13,934	—	—
1891-92	97,109	28,37,607	—	—
1896-97	1,03,920	32,09,825	—	—
1901-02	97,854	32,04,336	—	—
1906-07	1,12,930	39,37,866	—	—
1911-12	1,23,578	49,88,142	—	—
1916-17	1,42,203	58,18,730	—	—
1921-22	1,60,070	63,10,400	—	—
1926-27	1,89,348	82,56,760	2,85,694	26,156
1931-32	2,01,470	94,54,360	3,18,018	32,524
1936-37	1,97,227	1,05,41,790	3,36,072	40,243
1941-42	1,81,968	1,20,18,726	3,46,337	45,742
1946-47	1,72,661	1,30,36,248	3,50,541	55,589
1949-50	2,04,826	1,74,18,544	4,38,559	79,339
1950-51	2,09,679	1,82,93,967	4,55,637	82,281
1951-52	2,15,036	1,90,00,491	4,74,514	89,164
1952-53	2,22,014	1,95,23,003	4,87,602	99,110
1953-54	2,39,382	2,08,12,789	5,18,348	1,04,907
1954-55	2,63,626	2,21,96,160	5,62,589	1,13,212
1955-56	2,78,135	2,29,19,734	5,74,182	1,17,067
1956-57	2,87,298	2,39,22,567	5,88,878	1,21,261
1957-58	2,98,247	2,47,88,299	6,02,070	1,27,169
1958-59	3,01,245	2,43,66,875	5,77,467	1,17,813
1959-60	3,19,070	2,59,09,358	6,06,276	1,25,181

TABLE III
Average Salary and Pupil-Teacher Ratio in Primary Schools

Year	Total No. of teachers	Pupil-teacher ratio	Total direct expenditure on primary schools	Average annual salary of a primary teacher
1881-82	66,552	31	69,64,701	89
1886-87	N.A.	—	81,24,481	—
1891-92	N.A.	—	96,14,284	—
1896-97	N.A.	—	1,10,88,854	—
1901-02	1,11,259	29	1,18,75,759	91
1906-07	N.A.	—	1,55,53,512	—
1911-12	1,71,359	29	2,07,26,145	103
1916-17	2,19,667	26	2,93,13,545	113
1921-22	2,49,040	23	5,09,08,107	174
1926-27	3,11,850	26	6,95,21,696	189
1931-32	3,51,542	27	8,12,60,290	197
1936-37	3,76,315	28	8,37,77,979	189
1941-42	3,92,079	31	9,49,51,601	206
1946-47	4,06,130	32	18,48,53,225	387
1949-50	5,17,898	34	33,95,95,194	479
1950-51	5,37,918	34	36,48,43,098	494
1951-52	5,63,678	34	40,39,70,207	602
1952-53	5,86,712	33	44,20,38,765	635
1953-54	6,23,255	33	46,26,51,698	623
1954-55	6,75,801	33	50,89,27,789	633
1955-56	6,91,249	33	53,72,72,066	652
1956-57	7,10,139	34	58,47,78,161	694
1957-58	7,29,239	34	66,71,17,741	781
1958-59	6,95,280	35	63,63,55,010	723
1959-60	7,31,457	35	69,59,25,211	839

TABLE IV
Teachers in Middle Schools

Year	Total No. of middle schools	Total enrolment in middle schools	Total number of teachers in middle schools			Average pupil- teacher ratio	Total direct ex- penditure on middle schools	Average an- nual salary per teacher in middle schools
			Men	Women	Total			
1949-50	12,920	19,39,223	66,787	12,078	78,865	25	6,17,64,933	569·6
1950-51	13,596	20,72,508	72,609	12,887	85,496	24	7,69,89,998	682·4
1951-52	14,576	22,32,842	76,464	14,068	90,532	25	8,71,57,312	725·3
1952-53	15,340	23,08,751	81,989	15,003	96,992	24	9,63,89,393	745·1
1953-54	16,252	24,31,716	87,867	16,433	1,04,300	23	10,52,44,551	741·9
1954-55	17,318	25,95,041	94,671	17,078	1,11,749	23	11,45,85,286	774·1
1955-56	21,730	38,12,952	1,24,550	23,844	1,48,394	26	15,40,50,236	808·8
1956-57	24,486	43,92,223	1,35,467	31,096	1,66,563	26	17,14,89,940	831·6
1957-58	27,015	50,59,731	1,48,054	37,019	1,85,073	27	20,76,71,767	919·2
1958-59	39,597	81,69,504	2,05,774	59,907	2,65,681	31	31,83,47,104	1005·4
1959-60 (Provisional)	41,921	88,83,790	2,22,108	69,873	2,91,981	30	35,15,34,059	1023·5